Education and Community and Social Service Occupations

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Occupations Included in this Reprint

Archivists, Curators, and Museum Technicians

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Significant Points

- Employment usually requires graduate education and related work experience.
- Keen competition is expected because qualified applicants outnumber the most desirable job openings.

Nature of the Work

Archivists, curators, and museum technicians search for, acquire, appraise, analyze, describe, arrange, catalogue, restore, preserve, exhibit, maintain, and store valuable items that can be used by researchers or for exhibitions, publications, broadcasting, and other educational programs. Depending on the occupation, these items include historical documents, audiovisual materials, institutional records, works of art, coins, stamps, minerals, clothing, maps, living and preserved plants and animals, buildings, computer records, or historic sites.

Archivists and curators plan and oversee the arrangement, cataloguing, and exhibition of collections and, along with technicians and conservators, maintain collections. Archivists and curators may coordinate educational and public outreach programs, such as tours, workshops, lectures, and classes, and may work with the boards of institutions to administer plans and policies. They also may research topics or items relevant to their collections. Although some duties of archivists and curators are similar, the types of items they deal with differ. Curators usually handle objects found in cultural, biological, or historical collections, such as sculptures, textiles, and paintings, while archivists mainly handle valuable records, documents, or objects that are retained because they originally accompanied and relate specifically to the document.

Archivists determine what portion of the vast amount of records maintained by various organizations, such as government agencies, corporations, or educational institutions, or by families and individuals, should be made part of permanent historical holdings, and which of these records should be put on exhibit. They maintain records in their original arrangement according to the creator's organizational scheme, and describe records to facilitate retrieval. Records may be saved on any medium, including paper, film, videotape, audiotape, electronic disk, or computer. They also may be copied onto some other format to protect the original, and to make them more accessible to researchers who use the records. As computers and various storage media evolve, archivists must keep abreast of technological advances in electronic information storage.

Archives may be part of a library, museum, or historical society, or may exist as a distinct unit within an organization or company. Archivists consider any medium containing recorded information as documents, including letters, books, and other paper documents, photographs, blueprints, audiovisual materials, and computer records. Any document that reflects organizational transactions, hierarchy, or procedures can be considered a record. Archivists often specialize in an area of history or technology so they can better determine what records in that area qualify for retention and should become part of the archives. Archivists also may work with specialized forms of records, such as manuscripts, electronic records, photographs, cartographic records, motion pictures, and sound recordings.

Computers are increasingly used to generate and maintain archival records. Professional standards for use of computers in handling archival records are still evolving. However, computers are expected to transform many aspects of archival collections as computer capabilities, including multimedia and worldwide web use, expand and allow more records to be stored and exhibited electronically.

Curators oversee collections in museums, zoos, aquariums, botanical gardens, nature centers, and historic sites. They acquire items through purchases, gifts, field exploration, intermuseum exchanges, or, in the case of some plants and animals, reproduction. Curators also plan and prepare exhibits. In natural history museums, curators collect and observe specimens in their natural habitat. Their work involves describing and classifying species, while specially trained collection managers and technicians provide hands-on care of natural history collections. Most curators use computer databases to catalogue and organize their collections. Many also use the Internet to make information available to other curators and the public. Increasingly, curators are expected to participate in grant-writing and fundraising to support their projects.

Most curators specialize in a field, such as botany, art, paleontology, or history. Those working in large institutions may be highly specialized. A large natural history museum, for example, would employ specialists in birds, fishes, insects, and mollusks. Some curators maintain the collection, others do research, and others perform administrative tasks. Registrars, for example, keep track of and move objects in the collection. In small institutions, with only one or a few curators, one curator may be responsible for multiple tasks, from maintaining collections to directing the affairs of museums.

Curators sometimes must sort through artwork to select items for exhibition.

Conservators manage, care for, preserve, treat, and document works of art, artifacts, and specimens. This may require substantial historical, scientific, and archaeological research. They use x rays, chemical testing, microscopes, special lights, and other laboratory equipment and techniques to examine objects and determine their condition, the need for treatment or restoration, and the appropriate method for preservation. They then document their findings and treat items to minimize deterioration or restore items to their original state. Conservators usually specialize in a particular material or group of objects, such as documents and books, paintings, decorative arts, textiles, metals, or architectural material.

Museum technicians assist curators by performing various preparatory and maintenance tasks on museum items. Some museum technicians also may assist curators with research. Archives technicians help archivists organize, maintain, and provide access to historical documentary materials.

Museum directors formulate policies, plan budgets, and raise funds for their museums. They coordinate activities of their staff to establish and maintain collections. As their role has evolved, museum directors increasingly need business backgrounds in addition to an understanding of the subject matter of their collections.

Working Conditions

The working conditions of archivists and curators vary. Some spend most of their time working with the public, providing reference assistance and educational services. Others perform research or process records, which often means working alone or in offices with only a few people. Those who restore and install exhibits or work with bulky, heavy record containers may climb, stretch, or lift. Those in zoos, botanical gardens, and other outdoor museums or historic sites frequently walk great distances.

Curators who work in large institutions may travel extensively to evaluate potential additions to the collection, organize exhibitions, and conduct research in their area of expertise. However, travel is rare for curators employed in small institutions.

Employment

Archivists, curators, and museum technicians held about 21,000 jobs in 2000. About 34 percent were employed in museums, botanical gardens, and zoos, and 18 percent worked in educational services, mainly in college and university libraries. Nearly one-third worked in Federal, State, and local government. Most Federal archivists work for the National Archives and Records Administration; others manage military archives in the U.S. Department of Defense. Most Federal Government curators work at the Smithsonian Institution, in the military museums of the Department of Defense, and in archaeological and other museums managed by the U.S. Department of Interior. All State governments have archival or historical records sections employing archivists. State and local governments have numerous historical museums, parks, libraries, and zoos employing curators.

Some large corporations have archives or records centers, employing archivists to manage the growing volume of records created or maintained as required by law or necessary to the firms' operations. Religious and fraternal organizations, professional associations, conservation organizations, major private collectors, and research firms also employ archivists and curators.

Conservators may work under contract to treat particular items, rather than as regular employees of a museum or other institution. These conservators may work on their own as private contractors, or as an employee of a conservation laboratory or regional conservation center that contracts their services to museums.

Training, Other Qualifications, and Advancement

Employment as an archivist, conservator, or curator usually requires graduate education and related work experience. Many archivists and curators work in archives or museums while completing their formal education, to gain the "hands-on" experience that many employers seek when hiring.

Employers usually look for archivists with undergraduate and graduate degrees in history or library science, with courses in archival science. Some positions may require knowledge of the discipline related to the collection, such as business or medicine. An increasing number of archivists have a double master's degree in history and library science. There are currently no programs offering bachelor's or master's degrees in archival science. However, approximately 65 colleges and universities offer courses or practical training in archival science as part of history, library science, or another discipline. The Academy of Certified Archivists offers voluntary certification for archivists. Certification requires the applicant to have experience in the field and to pass an examination offered by the Academy.

Archivists need research and analytical ability to understand the content of documents and the context in which they were created, and to decipher deteriorated or poor quality printed matter, handwritten manuscripts, or photographs and films. A background in preservation management is often required of archivists because they are responsible for taking proper care of their records. Archivists also must be able to organize large amounts of information and write clear instructions for its retrieval and use. In addition, computer skills and the ability to work with electronic records and databases are increasingly important.

Many archives are very small, including one-person shops, with limited promotion opportunities. Archivists typically advance by transferring to a larger unit with supervisory positions. A doctorate in history, library science, or a related field may be needed for some advanced positions, such as director of a State archive.

For employment as a curator, most museums require a master's degree in an appropriate discipline of the museum's specialty—art, history, or archaeology—or museum studies. Many employers prefer a doctoral degree, particularly for curators in natural history or science museums. Earning two graduate degrees—in museum studies (museology) and a specialized subject—gives a candidate a distinct advantage in this competitive job market. In small museums, curatorial positions may be available to individuals with a bachelor's degree. For some positions, an internship of full-time museum work supplemented by courses in museum practices is needed.

Curatorial positions often require knowledge in a number of fields. For historic and artistic conservation, courses in chemistry, physics, and art are desirable. Since curators—particularly those in small museums—may have administrative and managerial responsibilities, courses in business administration, public relations, marketing, and fundraising also are recommended. Similar to archivists, curators need computer skills and the ability to work with electronic databases. Curators also need to be familiar with digital imaging, scanning technology, and copyright infringement, since many are responsible for posting information on the Internet.

Curators must be flexible because of their wide variety of duties. They need to design and present exhibits and, in small museums, manual dexterity to build exhibits or restore objects. Leadership ability and business skills are important for museum directors, while marketing skills are valuable for increasing museum attendance and fundraising.

In large museums, curators may advance through several levels of responsibility, eventually to museum director. Curators in smaller museums often advance to larger ones. Individual research and publications are important for advancement in larger institutions.

When hiring conservators, employers look for a master's degree in conservation, or in a closely related field, and substantial experience. There are only a few graduate programs in museum conservation techniques in the United States. Competition for entry to these programs is keen; to qualify, a student must have a background in chemistry, archaeology or studio art, and art history, as well as work experience. For some programs, knowledge of a foreign language is also helpful. Conservation apprenticeships or internships as an undergraduate can also enhance one's admission prospects. Graduate programs last 2 to 4 years; the latter years include internship training. A few individuals enter conservation through apprenticeships with museums, nonprofit organizations, and conservators in private practice. Apprenticeships should be supplemented with courses in chemistry, studio art, and history. Apprenticeship training, although accepted, usually is a more difficult route into the conservation profession.

Museum technicians usually need a bachelor's degree in an appropriate discipline of the museum's specialty, museum studies training, or previous museum work experience, particularly in exhibit design. Similarly, archives technicians usually need a bachelor's degree in library science or history, or relevant work experience. Technician positions often serve as a stepping stone for individuals interested in archival and curatorial work. With the exception of small museums, a master's degree is needed for advancement.

Relatively few schools grant a bachelor's degree in museum studies. More common are undergraduate minors or tracks of study that are part of an undergraduate degree in a related field, such as art history, history, or archaeology. Students interested in further study may obtain a master's degree in museum studies. Colleges and universities throughout the country offer master's degrees in museum studies. However, many employers feel that, while museum studies are helpful, a thorough knowledge of the museum's specialty and museum work experience are more important.

Continuing education, which enables archivists, curators, and museum technicians to keep up with developments in the field, is available through meetings, conferences, and workshops sponsored by archival, historical, and museum associations. Some larger organizations, such as the National Archives, offer such training in-house.

Job Outlook

Competition for jobs as archivists, curators, and museum technicians is expected to be keen as qualified applicants outnumber job openings. Graduates with highly specialized training, such as master's degrees in both library science and history, with a concentration in archives or records management, and extensive computer skills should have the best opportunities for jobs as archivists. A curator job is attractive to many people, and many applicants have the necessary training and subject knowledge; but there are only a few openings. Consequently, candidates may have to work part time, as an intern, or even as a volunteer assistant curator or research associate after completing their formal education. Substantial work experience in collection management, exhibit design, or restoration, as well as database management skills, will be necessary for permanent status. Job opportunities for curators should be best in art and history museums, since these are the largest employers in the museum industry.

The job outlook for conservators may be more favorable, particularly for graduates of conservation programs. However, competition is stiff for the limited number of openings in these programs, and applicants need a technical background. Students who qualify and successfully complete the program, have knowledge of a foreign language, and are willing to relocate, will have an advantage over less qualified candidates.

Employment of archivists, curators, and museum technicians is expected to increase about as fast as the average for all occupations through 2010. Jobs are expected to grow as public and private organizations emphasize establishing archives and organizing records and information, and as public interest in science, art, history, and technology increases. Although overall museum attendance is increasing, public interest in smaller, specialized museums with unique collections is expected to increase faster. However, museums and other cultural institutions are often subject to funding cuts during recessions or periods of budget tightening, reducing demand for archivists and curators. Although the rate of turnover among archivists and curators is relatively low, the need to replace workers who leave the occupation or stop working will create some additional job openings.

Earnings

Median annual earnings of archivists, curators, and museum technicians in 2000 were $33,080. The middle 50 percent earned between $24,740 and $45,490. The lowest 10 percent earned less than $19,200, and the highest 10 percent earned more than $61,490.

Median annual earnings of archivists, curators, and museum technicians in 2000 were $31,460 in museums and art galleries.

Earnings of archivists and curators vary considerably by type and size of employer, and often by specialty. Average salaries in the Federal Government, for example, are usually higher than those in religious organizations. Salaries of curators in large, well-funded museums can be several times higher than those in small ones.

The average annual salary for archivists in the Federal Government in nonsupervisory, supervisory, and managerial positions was $63,299 in 2001; museum curators, $64,616; museum specialists and technicians, $44,711; and archives technicians, $33,934.

Related Occupations

The skills that archivists, curators, and museum technicians use in preserving, organizing, and displaying objects or information of historical interest are shared by artists and related workers; librarians; and anthropologists and archeologists, historians, and other social scientists.

Sources of Additional Information

For information on archivists and on schools offering courses in archival studies, contact:

➤ Society of American Archivists, 527 South Wells St., 5th floor, Chicago, IL 60607-3922. Internet: **http://www.archivists.org**

For general information about careers as a curator and schools offering courses in museum studies, contact:

➤ American Association of Museums, 1575 I St. NW., Suite 400, Washington, DC 20005. Internet: **http://www.aam-us.org**

For information about conservation and preservation careers and education programs, contact:

➤ American Institute for Conservation of Historic and Artistic Works, 1717 K St. NW., Suite 301, Washington, DC 20006. Internet: **http://palimpsest.stanford.edu/aic**

Clergy

Nature of the Work

Religious beliefs—such as Buddhist, Christian, Jewish, or Islamic—are significant influences in the lives of millions of Americans, and prompt many to participate in organizations that reinforce their faith. Even within a religion many denominations may exist,

with each group having unique traditions and responsibilities assigned to its clergy. For example, Christianity has more than 70 denominations, while Judaism has 4 major branches, as well as groups within each branch, with diverse customs.

Clergy are religious and spiritual leaders, and teachers and interpreters of their traditions and faith. Most members of the clergy serve in a pulpit. They organize and lead regular religious services and officiate at special ceremonies, including confirmations, weddings, and funerals. They may lead worshipers in prayer, administer the sacraments, deliver sermons, and read from sacred texts such as the Bible, Torah, or Koran. When not conducting worship services, clergy organize, supervise, and lead religious education programs for their congregations. Clergy visit the sick or bereaved to provide comfort and they counsel persons who are seeking religious or moral guidance or who are troubled by family or personal problems. They also may work to expand the membership of their congregations and solicit donations to support their activities and facilities.

Clergy who serve large congregations often share their duties with associates or more junior clergy. Senior clergy may spend considerable time on administrative duties. They oversee the management of buildings, order supplies, contract for services and repairs, and supervise the work of staff and volunteers. Associate or assistant members of the clergy sometimes specialize in an area of religious service, such as music, education, or youth counseling. Clergy also work with committees and officials, elected by the congregation, who guide the management of the congregation's finances and real estate.

Other members of the clergy serve their religious communities in ways that do not call for them to hold positions in congregations. Some serve as chaplains in the U.S. Armed Forces and in hospitals, while others help to carry out the missions of religious community and social services agencies. A few members of the clergy serve in administrative or teaching posts in schools at all grade levels, including seminaries.

Working Conditions

Members of the clergy typically work irregular hours and many put in longer than average work days. Those who do not work in congregational settings may have more routine schedules. In 2000, almost one-fifth of full-time clergy worked 60 or more hours a week, more than 3 times that of all workers in professional occupations. Although many of their activities are sedentary and intellectual in nature, clergy frequently are called on short notice to visit the sick, comfort the dying and their families, and provide counseling to those in need. Involvement in community, administrative, and educational activities sometimes require clergy to work evenings, early mornings, holidays, and weekends.

Because of their roles as leaders regarding spiritual and morality issues, some members of the clergy often feel obligated to address and resolve both societal problems and the personal problems of their congregants, which can lead to stress.

Training and Other Qualifications

Educational requirements for entry into the clergy vary greatly. Similar to other professional occupations, about 3 out of 4 members of the clergy have completed at least a bachelor's degree. Many denominations require that clergy complete a bachelor's degree and a graduate-level program of theological study; others will admit anyone who has been "called" to the vocation. Some faiths do not allow women to become clergy; however, those that do are experiencing increases in the numbers of women seeking ordination. Men and women considering careers in the clergy should consult their religious leaders to verify specific entrance requirements.

Individuals considering a career in the clergy should realize they are choosing not only a career but also a way of life. In fact, most members of the clergy remain in their chosen vocation throughout their lives; in 2000, almost 9 percent of clergy were 65 or older, compared with only 3 percent of workers in all occupations.

Religious leaders must exude confidence and motivation, while remaining tolerant and able to listen to the needs of others. They should be capable of making difficult decisions, working under pressure, and living up to the moral standards set by their faith and community.

The following statements provide more detailed information on Protestant ministers, Rabbis, and Roman Catholic priests.

Protestant Ministers

(O*NET 21-2011.00)

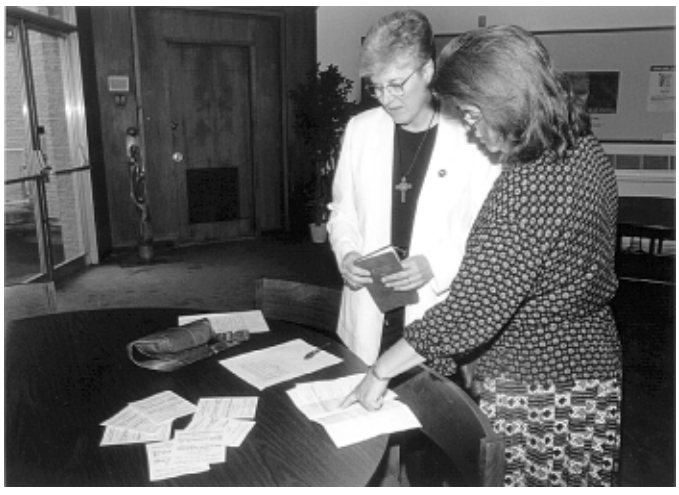
Significant Points

- Entry requirements vary greatly; many denominations require a bachelor's degree followed by study at a theological seminary, whereas others have no formal educational requirements.
- Competition for positions will vary among denominations and geographic regions.

Nature of the Work

Protestant ministers lead their congregations in worship services and administer the various rites of the church, such as baptism, confirmation, and Holy Communion. The services that ministers conduct differ among the numerous Protestant denominations and even among congregations within a denomination. In many denominations, ministers follow a traditional order of worship; in others, they adapt the services to the needs of youth and other groups within the congregation. Most services include Bible readings, hymn singing, prayers, and a sermon. In some denominations, Bible readings by members of the congregation and individual testimonials constitute a large part of the service. In addition to these duties, ministers officiate at weddings, funerals, and other occasions.

Each Protestant denomination has its own hierarchical structure. Some ministers are responsible only to the congregation they serve, whereas others are assigned duties by elder ministers or by



The services that Protestant ministers conduct differ among the numerous denominations.

the bishops of the diocese they serve. In some denominations, ministers are reassigned to a new pastorate by a central governing body or diocese every few years.

Ministers who serve small congregations usually work personally with parishioners. Those who serve large congregations may share specific aspects of the ministry with one or more associates or assistants, such as a minister of education or a minister of music.

Employment

There are many denominations; however, most ministers are employed by the five largest Protestant bodies—Baptist, Episcopalian, Lutheran, Methodist, and Presbyterian.

Although most ministers are located in urban areas, many serve two or more smaller congregations in less densely populated areas. Some small churches increasingly employ part-time ministers who are seminary students, retired ministers, or holders of secular jobs. Unpaid pastors serve other churches with meager funds. In addition, some churches employ specially trained members of the laity to conduct nonliturgical functions.

Training and Other Qualifications

Educational requirements for entry into the Protestant ministry vary greatly. Many denominations require, or at least strongly prefer, a bachelor's degree followed by study at a theological seminary. However, some denominations have no formal educational requirements, and others ordain persons having various types of training from Bible colleges or liberal arts colleges. Many denominations now allow women to be ordained, but some do not. Persons considering a career in the ministry should first verify the ministerial requirements with their particular denomination.

In general, each large denomination has its own schools of theology that reflect its particular doctrine, interests, and needs. However, many of these schools are open to students from other denominations. Several interdenominational schools associated with universities give both undergraduate and graduate training covering a wide range of theological points of view.

In 1999-2000, the Association of Theological Schools in the United States and Canada accredited 206 Protestant denominational theological schools. These schools only admit students who have received a bachelor's degree or its equivalent from an accredited college. After college graduation, many denominations require a 3-year course of professional study in one of these accredited schools, or seminaries, for the degree of Master of Divinity.

The standard curriculum for accredited theological schools consists of four major categories: Biblical studies, history, theology, and practical theology. Courses of a practical nature include pastoral care, preaching, religious education, and administration. Many accredited schools require that students work under the supervision of a faculty member or experienced minister. Some institutions offer Doctor of Ministry degrees to students who have completed additional study—usually 2 or more years—and served at least 2 years as a minister. Scholarships and loans often are available for students of theological institutions.

Persons who have denominational qualifications for the ministry usually are ordained after graduation from a seminary or after serving a probationary pastoral period. Denominations that do not require seminary training ordain clergy at various appointed times. Some churches ordain ministers with only a high school education.

Women and men entering the clergy often begin their careers as pastors of small congregations or as assistant pastors in large churches. Pastor positions in large metropolitan areas or in large congregations often require many years of experience.

Job Outlook

Job opportunities as Protestant ministers should be best for graduates of theological schools. The degree of competition for positions will vary among denominations and geographic regions. For example, relatively favorable prospects are expected for ministers in evangelical churches. Competition, however, will be keen for responsible positions serving large, urban congregations. Ministers willing to work part time or for small, rural congregations should have better opportunities. Many job openings will stem from the need to replace ministers who retire, die, or leave the ministry.

For newly ordained Protestant ministers who are unable to find parish positions, employment alternatives include working in youth counseling, family relations, and social welfare organizations; teaching in religious educational institutions; or serving as chaplains in the Armed Forces, hospitals, universities, and correctional institutions.

Earnings

Salaries of Protestant clergy vary substantially, depending on experience, denomination, size and wealth of the congregation, and geographic location. For example, some denominations tie a minister's pay to the average pay of the congregation or the community. As a result, ministers serving larger, wealthier congregations often earned significantly higher salaries than those in smaller, less affluent areas or congregations. Ministers with modest salaries sometimes earn additional income from employment in secular occupations.

Sources of Additional Information

Persons who are interested in entering the Protestant ministry should seek the counsel of a minister or church guidance worker. Theological schools can supply information on admission requirements. For information on special requirements for ordination, prospective ministers also should contact the ordination supervision body of their particular denomination.

Rabbis

(O*NET 21-2011.00)

Significant Points

- Ordination usually requires completion of a college degree followed by a 4- or 5-year program at a Jewish seminary.
- Job opportunities for rabbis are expected in all four major branches of Judaism through the year 2010.

Nature of the Work

Rabbis serve Orthodox, Conservative, Reform, and Reconstructionist Jewish congregations. Regardless of the branch of Judaism they serve or their individual points of view, all rabbis preserve the substance of Jewish religious worship. Congregations differ in the extent to which they follow the traditional form of worship—for example, in the wearing of head coverings, in the use of Hebrew as the language of prayer, and in the use of instrumental music or a choir. Additionally, the format of the worship service and, therefore, the ritual that the rabbi uses may vary even among congregations belonging to the same branch of Judaism.

Rabbis have greater independence in religious expression than other clergy, because of the absence of a formal religious hierarchy in Judaism. Instead, rabbis are responsible directly to the board of trustees of the congregation they serve. Those serving large congregations may spend considerable time in administrative duties, working with their staffs and committees. Large congregations frequently

Rabbis serve as teachers of the principles and practice of Judaism.

have associate or assistant rabbis, who often serve as educational directors. All rabbis play a role in community relations. For example, many rabbis serve on committees, alongside business and civic leaders in their communities to help find solutions to local problems.

Rabbis also may write for religious and lay publications and teach in theological seminaries, colleges, and universities.

Employment

Although the majority of rabbis served congregations representing the four main branches of Judaism, many rabbis functioned in other settings. Some taught in Jewish studies programs at colleges and universities, whereas others served as chaplains in hospitals, colleges, or the military. Additionally, some rabbis held positions in one of the many social service or Jewish community agencies.

Although rabbis serve Jewish communities throughout the Nation, they are concentrated in major metropolitan areas with large Jewish populations.

Training and Other Qualifications

To become eligible for ordination as a rabbi, a student must complete a course of study in a seminary. Entrance requirements and the curriculum depend upon the branch of Judaism with which the seminary is associated. Most seminaries require applicants to be college graduates.

Jewish seminaries typically take 5 years for completion of studies, with an additional preparatory year required for students without sufficient grounding in Hebrew and Jewish studies. In addition to the core academic program, training generally includes fieldwork and internships providing hands-on experience and, in some cases, study in Jerusalem. Seminary graduates are awarded the title Rabbi and earn the Master of Arts in Hebrew Letters degree. After more advanced study, some earn the Doctor of Hebrew Letters degree.

In general, the curricula of Jewish theological seminaries provide students with a comprehensive knowledge of the Bible, the Torah, rabbinic literature, Jewish history, Hebrew, theology, and courses in education, pastoral psychology, and public speaking. Students receive extensive practical training in dealing with social problems in the community. Training for alternatives to the pulpit, such as leadership in community services and religious education, is increasingly stressed. Some seminaries grant advanced academic degrees in such fields as biblical and Talmudic research. All Jewish theological seminaries make scholarships and loans available.

Major rabbinical seminaries include the Jewish Theological Seminary of America, which educates rabbis for the Conservative branch; the Hebrew Union College—Jewish Institute of Religion, which educates rabbis for the Reform branch; and the Reconstructionist Rabbinical College, which educates rabbis in the newest branch of Judaism. Seminaries educate and ordain Orthodox rabbis. Although the number of Orthodox seminaries is relatively high, the number of students attending each seminary is low. The Rabbi Isaac Elchanan Theological Seminary and the Beth Medrash Govoha Seminary are representative Orthodox seminaries. In all cases, rabbinic training is rigorous. When students have become sufficiently learned in the Torah, the Bible, and other religious texts, they may be ordained with the approval of an authorized rabbi, acting either independently or as a representative of a rabbinical seminary.

Newly ordained rabbis usually begin as spiritual leaders of small congregations, assistants to experienced rabbis, directors of Hillel Foundations on college campuses, teachers in educational institutions, or chaplains in the U.S. Armed Forces. As a rule, experienced rabbis fill the pulpits of large, well-established Jewish congregations.

Job Outlook

Job opportunities for rabbis are expected in all four major branches of Judaism through the year 2010. Rabbis willing to work in small, underserved communities should have the best prospects.

Graduates of Orthodox seminaries who seek pulpits should have opportunities as growth in enrollments slows and as many graduates seek alternatives to the pulpit. Rapidly expanding membership is expected to create employment opportunities for Reconstructionist rabbis. Conservative and Reform rabbis should have job opportunities serving congregations or in other settings because of the large size of these two branches of Judaism.

Earnings

In addition to their annual salary, benefits received by rabbis may include housing, health insurance, and a retirement plan. Income varies widely, depending on the size and financial status of the congregation, as well as denominational branch and geographic location. Rabbis may earn additional income from gifts or fees for officiating at ceremonies such as bar or bat mitzvahs and weddings.

Sources of Additional Information

Persons who are interested in becoming rabbis should discuss their plans with a practicing rabbi. Information on the work of rabbis and allied occupations can be obtained from:

- Rabbinical Council of America, 305 7th Ave., New York, NY 10001. Internet: **http://www.rabbis.org** (Orthodox)
- The Jewish Theological Seminary of America, 3080 Broadway, New York, NY 10027. Internet: **http://www.jtsa.edu** (Conservative)
- Hebrew Union College-Jewish Institute of Religion, One West 4th St., New York, NY 10012. Internet: **http://www.huc.edu** (Reform)
- Reconstructionist Rabbinical College, 1299 Church Rd., Wyncote, PA 19095. Internet: **http://www.rrc.edu** (Reconstructionist)

Roman Catholic Priests

(O*NET 21-2011.00)

Significant Points

- Preparation generally requires 8 years of study beyond high school, usually including a college degree followed by 4 or more years of theology study at a seminary.
- The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable outlook.

Nature of the Work

Priests in the Catholic Church may be categorized as either diocesan or religious. Both types of priests have the same priesthood faculties, acquired through ordination by a bishop. Differences lie in their way of life, type of work, and the Church authority to which they are responsible. *Diocesan priests* commit their lives to serving the people of a diocese, a church administrative region, and generally work in parishes, schools, or other Catholic institutions as assigned by the bishop of their diocese. Diocesan priests take oaths of celibacy and obedience. *Religious priests* belong to a religious order, such as the Jesuits, Dominicans, or Franciscans. In addition to the vows taken by diocesan priests, religious priests take a vow of poverty.

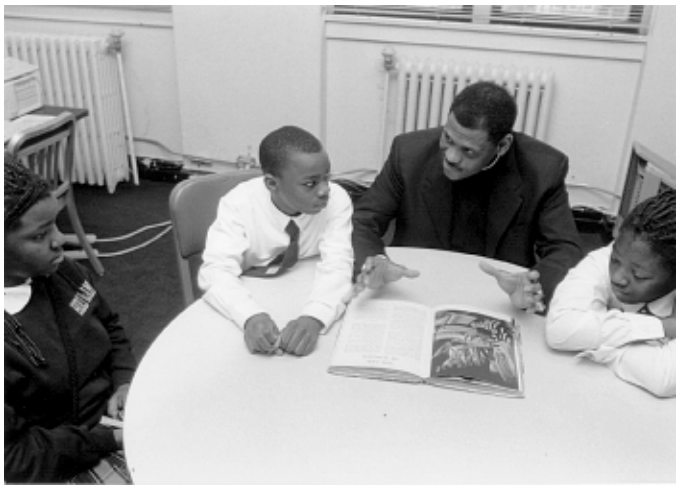
Diocesan priests attend to the spiritual, pastoral, moral, and educational needs of the members of their church. A priest's day usually begins with morning meditation and mass and may end with an individual counseling session or an evening visit to a hospital or home. Many priests direct and serve on church committees, work in civic and charitable organizations, and assist in community projects. Some counsel parishioners preparing for marriage or the birth of a child.

Religious priests receive duty assignments from their superiors in their respective religious orders. Some religious priests specialize in teaching, whereas others serve as missionaries in foreign countries, where they may live under difficult and primitive conditions. Other religious priests live a communal life in monasteries, where they devote their lives to prayer, study, and assigned work.

Both religious and diocesan priests hold teaching and administrative posts in Catholic seminaries, colleges and universities, and high schools. Priests attached to religious orders staff many of the Church's institutions of higher education and many high schools, whereas diocesan priests usually are concerned with the parochial schools attached to parish churches and with diocesan high schools. Members of religious orders do much of the missionary work conducted by the Catholic Church in this country and abroad.

Employment

According to *The Official Catholic Directory*, there were approximately 45,000 priests in 2000; about 30,000 were diocesan priests. Priests are found in nearly every city and town and in many rural communities; however, the majority is in metropolitan areas, where most Catholics reside.



Some Roman Catholic priests specialize in teaching.

Training and Other Qualifications

Men exclusively are ordained as priests. Women may serve in church positions that do not require priestly ordination. Preparation for the priesthood generally requires 8 years of study beyond high school, usually including a college degree followed by 4 or more years of theology study at a seminary.

Preparatory study for the priesthood may begin in the first year of high school, at the college level, or in theological seminaries after college graduation. Nine high-school seminary programs—five free-standing high school seminaries and four programs within Catholic high schools—provided a college preparatory program in 2000. Programs emphasize and support religious formation in addition to a regular, college-preparatory curriculum. Latin may be required, and modern languages are encouraged. In Hispanic communities, knowledge of Spanish is mandatory.

Those who begin training for the priesthood in college do so in one of 42 priesthood formation programs offered either through Catholic colleges or universities or in freestanding college seminaries. Preparatory studies usually include training in philosophy, religious studies, and prayer.

Today, most candidates for the priesthood have a 4-year degree from an accredited college or university, then attend one of 46 theological seminaries (also called theologates) and earn either the Master of Divinity or the Master of Arts degree. Thirty-four theologates primarily train diocesan priests, whereas 12 theologates provide information mostly for priesthood candidates from religious orders. (Slight variations in training reflect the differences in their expected duties.) Theology coursework includes sacred scripture; dogmatic, moral, and pastoral theology; homiletics (art of preaching); church history; liturgy (sacraments); and canon (church) law. Fieldwork experience usually is required.

Young men are never denied entry into seminaries because of lack of funds. In seminaries for diocesan priests, scholarships or loans are available, and contributions of benefactors and the Catholic Church finance those in religious seminaries—who have taken a vow of poverty and are not expected to have personal resources.

Graduate work in theology beyond that required for ordination also is offered at a number of American Catholic universities or at ecclesiastical universities around the world, particularly in Rome. Also, many priests do graduate work in fields unrelated to theology. Priests are encouraged by the Catholic Church to continue their studies, at least informally, after ordination. In recent years, the Church has stressed continuing education for ordained priests in the social sciences, such as sociology and psychology.

A newly ordained diocesan priest usually works as an assistant pastor. Newly ordained priests of religious orders are assigned to the specialized duties for which they have been trained. Depending on the talents, interests, and experience of the individual, many opportunities for additional responsibility exist within the Church.

Job Outlook

The shortage of Roman Catholic priests is expected to continue, resulting in a very favorable job outlook through the year 2010. Many priests will be needed in the years ahead to provide for the spiritual, educational, and social needs of the increasing number of Catholics. In recent years, the number of ordained priests has been insufficient to fill the needs of newly established parishes and other Catholic institutions and to replace priests who retire, die, or leave the priesthood. This situation is likely to continue, as seminary enrollments remain below the levels needed to overcome the current shortfall of priests.

In response to the shortage of priests, permanent deacons and teams of clergy and laity increasingly are performing certain traditional functions within the Catholic Church. The number of ordained

deacons has increased 30 percent over the past 20 years, and this trend should continue. Throughout most of the country, permanent deacons have been ordained to preach and perform liturgical functions, such as baptisms, marriages, and funerals, and to provide service to the community. Deacons are not authorized to celebrate Mass, nor are they allowed to administer the Sacraments of Reconciliation and the Anointing of the Sick. Teams of clergy and laity undertake some liturgical and nonliturgical functions, such as hospital visits and religious teaching.

Earnings

Salaries of diocesan priests vary from diocese to diocese. According to a biennial survey of the National Federation of Priests' Council, low-end salaries averaged $12,936 per year in 1999; high-end salaries averaged $15,483 per year. In addition to a salary, diocesan priests receive a package of benefits that may include a car allowance, room and board in the parish rectory, health insurance, and a retirement plan.

Diocesan priests who do special work related to the church, such as teaching, usually receive a salary which is less than a lay person in the same position would receive. The difference between the usual salary for these jobs and the salary that the priest receives is called "contributed service." In some situations, housing and related expenses may be provided; in other cases, the priest must make his own arrangements. Some priests doing special work receive the same compensation that a lay person would receive.

Religious priests take a vow of poverty and are supported by their religious order. Any personal earnings are given to the order. Their vow of poverty is recognized by the Internal Revenue Service, which exempts them from paying Federal income tax.

Sources of Additional Information

Young men interested in entering the priesthood should seek the guidance and counsel of their parish priests and diocesan vocational office. For information regarding the different religious orders and the diocesan priesthood, as well as a list of the seminaries that prepare students for the priesthood, contact the diocesan director of vocations through the office of the local pastor or bishop.

Individuals seeking additional information about careers in the Catholic Ministry should contact their local diocese.

For information on training programs for the Catholic ministry, contact:

➤ Center for Applied Research in the Apostolate (CARA), Georgetown University, 2300 Wisconsin Ave. NW., Suite 400, Washington, DC 20057. Internet: **http://cara.georgetown.edu**

Counselors

(O*NET 21-1011.00, 21-1012.00, 21-1013.00, 21-1014.00, 21-1015.00))

Significant Points

- Over half of all counselors have a master's degree.
- Most States require some form of counselor credentialing, licensure, certification, or registry for practice outside schools; all States require school counselors to hold a State school counseling certification.

Nature of the Work

Counselors assist people with personal, family, educational, mental health, and career decisions and problems. Their duties depend on the individuals they serve and on the settings in which they work.

Educational, vocational, and school counselors—in elementary, secondary, and postsecondary schools—help students evaluate their abilities, interests, talents, and personality characteristics in order to develop realistic academic and career goals. Counselors use interviews, counseling sessions, tests, or other methods when evaluating and advising students. They operate career information centers and career education programs. High school counselors advise on college majors, admission requirements, entrance exams, and financial aid and on trade or technical schools and apprenticeship programs. They help students develop job search skills such as resume writing and interviewing techniques. College career planning and placement counselors assist alumni or students with career development and job hunting techniques.

Elementary school counselors observe younger children during classroom and play activities, and confer with their teachers and parents to evaluate their strengths, problems, or special needs. They also help students develop good study habits. They do less vocational and academic counseling than do secondary school counselors.

School counselors at all levels help students understand and deal with social, behavioral, and personal problems. These counselors emphasize preventive and developmental counseling to provide students with the life skills needed to deal with problems before they occur, and to enhance personal, social, and academic growth. Counselors provide special services, including alcohol and drug prevention programs, and classes that teach students to handle conflicts without resorting to violence. Counselors also try to identify cases involving domestic abuse and other family problems that can affect a student's development. Counselors work with students individually, with small groups, or with entire classes. They consult and work with parents, teachers, school administrators, school psychologists, school nurses, and social workers.

Vocational counselors (also called *employment counselors* when working outside a school setting) help individuals make career decisions. They explore and evaluate the client's education, training, work history, interests, skills, and personal traits, and arrange for aptitude and achievement tests. They also work with individuals to develop job search skills and assist clients in locating and applying for jobs.

Rehabilitation counselors help people deal with the personal, social, and vocational effects of disabilities. They counsel people with disabilities resulting from birth defects, illness or disease, accidents, or the stress of daily life. They evaluate the strengths and limitations of individuals, provide personal and vocational counseling, and arrange for medical care, vocational training, and job placement. Rehabilitation counselors interview individuals with disabilities and their families, evaluate school and medical reports, and confer and plan with physicians, psychologists, occupational therapists, and employers to determine the capabilities and skills of the individual. Conferring with the client, they develop a rehabilitation program, which often includes training to help the person develop job skills. They also work toward increasing the client's capacity to live independently.

Mental health counselors emphasize prevention, and work with individuals and groups to promote optimum mental health. They help individuals deal with addictions and substance abuse, suicidal impulses, stress management, problems with self-esteem, issues associated with aging, job and career concerns, educational decisions, issues related to mental and emotional health, and family, parenting, and marital problems. Mental health counselors work closely with other mental health specialists, including psychiatrists, psychologists, clinical social workers, psychiatric nurses, and school counselors. (Information on other mental health specialists appears in the *Handbook* statements on physicians and surgeons, psychologists, registered nurses, and social workers.)

Counselors assist people with personal, family, educational, mental health, and career decisions and problems.

Substance abuse and behavioral disorder counselors help people who have problems with alcohol, drugs, gambling, and eating disorders. They counsel individuals who are addicted to drugs to help them identify behaviors and problems related to their addiction. They hold counseling sessions for one person, for families, or for groups of people to assist them in dealing with problems.

Marriage and family therapists apply principles, methods, and therapeutic techniques to individuals, family groups, couples or organizations for the purpose of resolving emotional conflicts. In doing so, they modify perceptions and behavior, enhance communication and understanding among all family members, and help to prevent family and individual crisis. Individual marriage and family therapists also may engage in psychotherapy of a nonmedical nature, with appropriate referrals to psychiatric resources, and in research and teaching in the overall field of human development and interpersonal relationships.

Other counseling specialties include gerontological or multicultural counseling. A gerontological counselor provides services to elderly persons who face changing lifestyles because of health problems, and helps families cope with these changes. A multicultural counselor helps employers adjust to an increasingly diverse workforce.

Working Conditions

Most educational, vocational, and school counselors work the traditional 9- to 10-month school year with a 2- to 3-month vacation, although increasing numbers are employed on 10 1/2- or 11-month contracts. They usually work the same hours that teachers do. College career planning and placement counselors work long and irregular hours during student recruiting periods.

Rehabilitation counselors usually work a standard 40-hour week. Self-employed counselors and those working in mental health and community agencies, such as substance abuse and behavioral disorder counselors, often work evenings to counsel clients who work during the day. Marriage and family counselors also often work flexible hours to accommodate families in crisis or working couples who must have evening or weekend appointments.

Counselors must possess high physical and emotional energy to handle the array of problems they address. Dealing daily with these problems can cause stress. Because privacy is essential for confidential and frank discussions with clients, counselors usually have private offices.

Employment

Counselors held about 465,000 jobs in 2000. Employment was distributed among the counseling specialties as follows:

Educational, vocational, and school counselors	205,000
Rehabilitation counselors	110,000
Mental health counselors	67,000
Substance abuse and behavioral disorder counselors	61,000
Marriage and family therapists	21,000

Educational, vocational, and school counselors work primarily in elementary and secondary schools and colleges and universities. Other types of counselors work in a wide variety of public and private establishments. These include healthcare facilities; job training, career development, and vocational rehabilitation centers; social agencies; correctional institutions; and residential care facilities, such as halfway houses for criminal offenders and group homes for children, the elderly , and the disabled. Some substance abuse and behavioral disorder counselors work in therapeutic communities where addicts live while under treatment. Counselors also work in organizations engaged in community improvement and social change, as well as in drug and alcohol rehabilitation programs and State and local government agencies. A growing number of counselors work in health maintenance organizations, insurance companies, group practice, and private practice. This growth has been spurred by laws allowing counselors to receive payments from insurance companies and requiring employers to provide rehabilitation and counseling services to employees.

Training, Other Qualifications, and Advancement

Formal education is necessary to gain employment as a counselor. About half of all counselors have a master's degree; fields of study include college student affairs, elementary or secondary school counseling, education, gerontological counseling, marriage and family counseling, substance abuse counseling, rehabilitation counseling, agency or community counseling, clinical mental health counseling, counseling psychology, career counseling, and related fields.

Graduate-level counselor education programs in colleges and universities usually are in departments of education or psychology. Courses are grouped into eight core areas: Human growth and development, social and cultural diversity, relationships, groupwork, career development, assessment, research and program evaluation, and professional identity. In an accredited program, 48 to 60 semester hours of graduate study, including a period of supervised clinical experience in counseling, are required for a master's degree. In 2000, 149 institutions offered programs in counselor education—including career, community, gerontological, mental health, school, student affairs, and marriage and family counseling—that

were accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). CACREP also recognizes many counselor education programs, apart from the 149 accredited institutions, that use alternative instruction methods, such as distance learning. Programs that use alternative instruction methods are evaluated using the same standards for accreditation that CACREP applies to programs that employ more-traditional methods. Another organization, the Council on Rehabilitation Education (CORE), accredits graduate programs in rehabilitation counseling. Accredited master's degree programs include a minimum of 2 years of full-time study, including 600 hours of supervised clinical internship experience.

In 2001, 46 States and the District of Columbia had some form of counselor credentialing, licensure, certification, or registry legislation governing practice outside schools. Requirements vary from State to State. In some States, credentialing is mandatory; in others, it is voluntary.

All States require school counselors to hold State school counseling certification; however, certification requirements vary from State to State. Some States require public school counselors to have both counseling and teaching certificates. Depending on the State, a master's degree in counseling and 2 to 5 years of teaching experience could be required for a school counseling certificate.

Counselors must be aware of educational and training requirements that are often very detailed and that vary by area and by counseling specialty. Prospective counselors should check with State and local governments, employers, and national voluntary certification organizations in order to determine which requirements apply.

Many counselors elect to be nationally certified by the National Board for Certified Counselors, Inc. (NBCC), which grants the general practice credential, "National Certified Counselor." To be certified, a counselor must hold a master's or higher degree with a concentration in counseling from a regionally accredited college or university; have at least 2 years of supervised field experience in a counseling setting (graduates from counselor education programs accredited by CACREP are exempted); provide two professional endorsements, one of which must be from a recent supervisor; and have a passing score on the NBCC's National Counselor Examination for Licensure and Certification (NCE). This national certification is voluntary, and is distinct from State certification. However, in some States, those who pass the national exam are exempted from taking a State certification exam. NBCC also offers specialty certification in school, clinical mental health, and addictions counseling. To maintain their certification, counselors retake and pass the NCE or complete 100 hours of acceptable continuing education credit every 5 years.

Another organization, the Commission on Rehabilitation Counselor Certification, offers voluntary national certification for rehabilitation counselors. Many employers require rehabilitation counselors to be nationally certified. To become certified, rehabilitation counselors usually must graduate from an accredited educational program, complete an internship, and pass a written examination. (Certification requirements vary according to an applicant's educational history. Employment experience, for example, is required for those with a counseling degree in a specialty other than rehabilitation.) After meeting these requirements, candidates are then designated as "Certified Rehabilitation Counselors." To maintain their certification, counselors must successfully retake the certification exam or complete 100 hours of acceptable continuing education credit every 5 years.

Vocational and related rehabilitation agencies usually require a master's degree in rehabilitation counseling, counseling and guidance, or counseling psychology for rehabilitation counselor jobs. Some, however, accept applicants with a bachelor's degree in rehabilitation services, counseling, psychology, sociology, or related fields. A bachelor's degree often qualifies a person to work as a counseling aide, rehabilitation aide, or social service worker. Experience in employment counseling, job development, psychology, education, or social work is helpful.

Some States require counselors in public employment offices to have a master's degree; others accept a bachelor's degree with appropriate counseling courses. A 6-year, master's level degree is the minimum education required to enter the field of marriage and family therapy.

Clinical mental health counselors usually have a master's degree in mental health counseling, in another area of counseling, or in psychology or social work. Voluntary certification is available through the NBCC. Generally, to receive certification as a clinical mental health counselor, a counselor must have a master's degree in counseling, 2 years of postmaster's experience, a period of supervised clinical experience, a taped sample of clinical work, and a passing grade on a written examination.

Some employers provide training for newly hired counselors. Many have work-study programs so that those employed counselors can earn graduate degrees. Counselors must participate in graduate studies, workshops, and personal studies to maintain their certificates and licenses.

Persons interested in counseling should have a strong interest in helping others and the ability to inspire respect, trust, and confidence. They should be able to work independently or as part of a team. Counselors follow the code of ethics associated with their respective certifications and licenses.

Prospects for advancement vary by counseling field. School counselors can move to a larger school; become directors or supervisors of counseling, guidance, or pupil personnel services; or, usually with further graduate education, become counselor educators, counseling psychologists, or school administrators. (See the statements on psychologists and education administrators elsewhere in the *Handbook*.) Some counselors choose to work for a State's department of education. For marriage and family therapists, doctoral education in family therapy emphasizes the training of supervisors, teachers, researchers, and clinicians in the discipline.

Counselors can become supervisors or administrators in their agencies. Some counselors move into research, consulting, or college teaching, or go into private or group practice.

Job Outlook

Overall employment of counselors is expected to grow faster than the average for all occupations through 2010. In addition, numerous job openings will occur as many counselors reach retirement age.

Employment of educational, vocational, and school counselors is expected to grow as a result of increasing student enrollments, particularly in secondary and postsecondary schools; State legislation requiring counselors in elementary schools; and expansion of the responsibilities of counselors. For example, counselors are becoming more involved in crisis and preventive counseling, helping students deal with issues ranging from drug and alcohol abuse to death and suicide. Also, in order to decrease the student-to-counselor ratio, school districts in many States are using Federal grants to establish or expand elementary school counseling programs. Over the long term, however, budget constraints may dampen job growth of school counselors.

The demand for vocational, or employment, counselors, who work primarily for State and local government, is expected to continue to grow as current welfare laws require welfare recipients to find jobs. However, uncertainty about the future of welfare reform (the Welfare Reform Act of 1996 expires in September 2002) could

limit this growth. Opportunities for employment counselors working in private job-training services should grow as counselors provide training and other services to laid-off workers, experienced workers seeking a new or second career, full-time homemakers seeking to enter or reenter the workforce, and workers who want to upgrade their skills.

Demand is expected to be strong for substance abuse and behavioral, mental health, and marriage and family therapists and for rehabilitation counselors, for a variety of reasons. The increasing availability of funds to build statewide networks to improve services for children and adolescents with serious emotional disturbances and their family members should increase employment opportunities for counselors. Under managed care systems, insurance companies increasingly provide for reimbursement of counselors, enabling many counselors to move from schools and government agencies to private practice. Counselors also are forming group practices to receive expanded insurance coverage. The number of people who need rehabilitation services will grow as advances in medical technology continue to save lives that only a few years ago would have been lost. In addition, legislation requiring equal employment rights for people with disabilities will spur demand for counselors. Counselors not only will help individuals with disabilities with their transition into the workforce, but also will help companies comply with the law. Employers also are increasingly offering employee assistance programs that provide mental health and alcohol and drug abuse services. More people are expected to use these services as the elderly population grows and as society focuses on ways of developing mental well-being, such as controlling stress associated with job and family responsibilities.

Earnings

Median annual earnings of educational, vocational, and school counselors in 2000 were $42,110. The middle 50 percent earned between $31,640 and $53,930. The lowest 10 percent earned less than $23,560, and the highest 10 percent earned more than $67,170. School counselors can earn additional income working summers in the school system or in other jobs. Median annual earnings in the industries employing the largest numbers of educational, vocational, and school counselors in 2000 were as follows:

Elementary and secondary schools	$46,850
State government	41,020
Colleges and universities	37,040
Job training and related services	25,210

Median annual earnings of substance abuse and behavioral disorder counselors in 2000 were $28,510. The middle 50 percent earned between $23,280 and $35,250. The lowest 10 percent earned less than $18,850, and the highest 10 percent earned more than $43,420. Median annual earnings in the industries employing the largest numbers of substance abuse and behavioral disorder counselors in 2000 were as follows:

Local government	$31,640
Hospitals	31,600
Health and allied services, NEC	28,170
Individual and family services	27,030
Residental care	24,930

Median annual earnings of mental health counselors in 2000 were $27,570. The middle 50 percent earned between $22,220 and $36,150. The lowest 10 percent earned less than $18,500, and the highest 10 percent earned more than $46,270. Median annual earnings in the industries employing the largest numbers of mental health counselors in 2000 were as follows:

Local government	$34,480
Hospitals	30,900
Health and allied servies, NEC	28,690
Individual and family services	28,040
Residential care	22,920

Median annual earnings of rehabilitation counselors in 2000 were $24,450. The middle 50 percent earned between $19,080 and $33,000. The lowest 10 percent earned less than $15,790, and the highest 10 percent earned more than $42,790. Median annual earnings in the industries employing the largest numbers of rehabilitation counselors in 2000 were as follows:

State government	$34,470
Hospitals	31,140
Individual and family services	23,650
Job training and related services	23,070
Residential care	20,360

Median annual earnings of marriage and family therapists in 2000 were $34,660. The middle 50 percent earned between $27,970 and $44,320. The lowest 10 percent earned less than $22,770, and the highest 10 percent earned more than $44,320. Median annual earnings in 2000 were $33,140 in individual and family social services, the industry employing their largest numbers.

Self-employed counselors who have well-established practices, as well as counselors employed in group practices, usually have the highest earnings, as do some counselors working for private firms, such as insurance companies and private rehabilitation companies.

Related Occupations

Counselors help people evaluate their interests, abilities, and disabilities, and deal with personal, social, academic, and career problems. Others who help people in similar ways include teachers, social and human service assistants, social workers, psychologists, physicians and surgeons, registered nurses, members of the clergy, occupational therapists, and human resources, training, and labor relations managers and specialists.

Sources of Additional Information

For general information about counseling, as well as information on specialties such as school, college, mental health, rehabilitation, multicultural, career, marriage and family, and gerontological counseling, contact:

➤ American Counseling Association, 5999 Stevenson Ave., Alexandria, VA 22304-3300. Internet: **http://www.counseling.org**

For information on accredited counseling and related training programs, contact:

➤ Council for Accreditation of Counseling and Related Educational Programs, American Counseling Association, 5999 Stevenson Ave., 4th floor, Alexandria, VA 22304. Internet: **http://www.counseling.org/cacrep**

For information on national certification requirements for counselors, contact:

➤ National Board for Certified Counselors, Inc., 3 Terrace Way, Suite D, Greensboro, NC 27403-3660. Internet: **http://www.nbcc.org**

For information on certification requirements for rehabilitation counselors and a list of accredited rehabilitation education programs, contact:

➤ Commission on Rehabilitation Counselor Certification, 1835 Rohlwing Rd., Suite E, Rolling Meadows, IL 60008.

State departments of education can supply information on colleges and universities that offer guidance and counseling training that meets State certification and licensure requirements.

State employment service offices have information about job opportunities and entrance requirements for counselors.

Instructional Coordinators

(O*NET 25-9031.00)

Significant Points

- Many instructional coordinators are former teachers or principals.
- A bachelor's degree is the minimum educational requirement; however, a graduate degree is preferred.
- The need to update and improve educational standards will create more demand for instructional coordinators to train teachers and develop new materials.

Nature of the Work

Instructional coordinators, also known as curriculum specialists, staff development specialists, or directors of instructional material, play a large role in improving the quality of education in the classroom. They develop instructional materials, train teachers, and assess educational programs in terms of quality and adherence to regulations and standards. They also assist in implementing new technology in the classroom. Instructional coordinators often specialize in specific subjects, such as language arts, mathematics, social studies, gifted and talented, or English as a Second Language.

Instructional coordinators evaluate how well a school's curriculum meets students' needs. They research teaching methods and techniques and develop procedures to determine whether program goals are being met. To aid in their evaluation, they may meet with members of educational committees and advisory groups to learn about subjects—English, history, or mathematics, for example—and to relate curriculum materials to these subjects, to students' needs, and to occupations for which these subjects are good preparation. They also may develop questionnaires and interview school staff about the curriculum. Based on their research and observations of instructional practice, they recommend instruction and curriculum improvements.

Another duty instructional coordinators have is to review textbooks, software, and other educational materials and make recommendations on purchases. They monitor materials ordered and the ways in which teachers use them in the classroom. They also supervise workers who catalogue, distribute, and maintain a school's educational materials and equipment.

Instructional coordinators find effective ways to use technology to enhance student learning. They monitor the introduction of new technology, including the Internet, into a school's curriculum. In addition, instructional coordinators might recommend installing educational computer software, such as interactive books and exercises designed to enhance student literacy and develop math skills. Instructional coordinators may invite experts—such as computer hardware, software, and library or media specialists—into the classroom to help integrate technological materials into a school's curriculum.

Many instructional coordinators plan and provide onsite education for teachers and administrators. They may train teachers about the use of materials and equipment or help them to improve their skills. Instructional coordinators also mentor new teachers and train experienced ones in the latest instructional methods. This role becomes especially important when a school district introduces new content, program innovations, or different organizational structure. For example, when a State or school district introduces standards or tests that must be met by students in order to pass to the next grade, instructional coordinators often must advise teachers on the content of the standards and provide instruction on implementing the standards in the classroom.

Instructional coordinators review textbooks and other educational materials to see if they meet curriculum standards.

Working Conditions

Instructional coordinators, including those employed by school districts, work year round, usually in comfortable offices or classrooms. Some spend much of their time traveling between schools meeting with teachers and administrators. The opportunity to shape and improve instructional curricula and work in an academic environment can be satisfying. However, some instructional coordinators find the work stressful because the occupation requires continual accountability to school administrators and, occasionally, long hours.

Employment

Instructional coordinators held about 81,000 jobs in 2000. Two in three worked in public and private education, which includes elementary, secondary, and technical schools and colleges and universities. Another 1 in 10 worked for Departments of Education in State and local governments. The remainder worked primarily in management and public relations establishments, in which they did educational consulting and developed instructional materials sold to schools; and in child daycare services.

Training, Other Qualifications, and Advancement

The minimum educational requirement for instructional coordinators is a bachelor's degree, usually in education. Most employers, however, prefer candidates with a master's degree or higher, either in a field such as curriculum and instruction, educational technology, or instructional technology, or in an instructional content area, such as mathematics. Instructional coordinators must have a good understanding of how to teach specific groups of students, in addition to expertise in developing educational materials. Therefore, several years of teaching experience is, although not mandatory, highly desirable. Experience in an administrative position, such as principal or assistant principal, also is beneficial.

Courses in curriculum development and evaluation, research design, and computer literacy are recommended. Moreover, instructional coordinators usually are required to take continuing education courses to keep their skills current. Courses may include teacher evaluation techniques, curriculum training, new teacher induction, consulting and teacher support, and observation and analysis of teaching.

Instructional coordinators must be able to make sound decisions about curriculum options and to organize and coordinate work efficiently. They should have strong interpersonal and communication skills. Familiarity with computer technology also is important for instructional coordinators, who are increasingly involved

in gathering and coordinating technical information for students and teachers.

Depending on experience and educational attainment, instructional coordinators may advance to higher positions in a school system, or to management or executive positions in private industry.

Job Outlook

Employment of instructional coordinators is expected to grow faster than the average for all occupations through the year 2010. Rising school enrollments, more student services, and a continuing emphasis on improving the quality of education will spur demand. Instructional coordinators will be instrumental in developing new curricula to meet the demands of a changing society and in training the teacher workforce. As more States institute standards for different grade levels, coordinators will be needed to incorporate the standards into curriculums and make sure teachers and administrators are informed of the changes.

Instructional coordinators also will be needed to provide classes on using technology in the classroom, to keep teachers up-to-date on changes in their fields, and to demonstrate new teaching techniques. Professional training for teachers will grow in importance as more individuals enter the teaching profession without an education background or experience.

Job growth for instructional coordinators also will stem from the increasing emphasis on lifelong learning and on programs for students with special needs, including those for whom English is a second language. These students often require more educational resources and consolidated planning and management within the educational system.

Earnings

Median annual earnings of instructional coordinators in 2000 were $44,230. The middle 50 percent earned between $32,150 and $58,480. The lowest 10 percent earned less than $24,370, and the highest 10 percent earned more than $72,020.

Related Occupations

Instructional coordinators are professionals involved in education and training and development, which requires organizational, administrative, teaching, research, and communication skills. Occupations with similar characteristics include preschool, kindergarten, elementary, middle, and secondary school teachers; postsecondary teachers; education administrators; counselors; and human resources, training, and labor relations managers and specialists.

Sources of Additional Information

Information on requirements and job opportunities for instructional coordinators is available from local school systems and State departments of education.

Librarians

(O*NET 25-4021.00)

Significant Points

- A master's degree in library science usually is required; special librarians often need an additional graduate or professional degree.
- Applicants for librarian jobs in large cities or suburban areas will face competition, while those willing to work in rural areas should have better job prospects.

Nature of the Work

The traditional concept of a library is being redefined from a place to access paper records or books, to one which also houses the most advanced mediums, including CD-ROM, the Internet, virtual libraries, and remote access to a wide range of resources. Consequently, librarians increasingly are combining traditional duties with tasks involving quickly changing technology. Librarians assist people in finding information and using it effectively for personal and professional purposes. Librarians must have knowledge of a wide variety of scholarly and public information sources, and follow trends related to publishing, computers, and the media to effectively oversee the selection and organization of library materials. They manage staff and develop and direct information programs and systems for the public to ensure information is organized to meet users' needs.

Most librarian positions incorporate three aspects of library work: User services, technical services, and administrative services. Even librarians specializing in one of these areas perform other responsibilities. Librarians in user services, such as reference and children's librarians, work with the public to help them find the information they need. This involves analyzing users' needs to determine what information is appropriate, and searching for, acquiring, and providing information. It also includes an instructional role, such as showing users how to access information. For example, librarians commonly help users navigate the Internet, showing them how to most efficiently search for relevant information. Librarians in technical services, such as acquisitions and cataloguing, acquire and prepare materials for use and often do not deal directly with the public. Librarians in administrative services oversee the management and planning of libraries, negotiate contracts for services, materials, and equipment, supervise library employees, perform public relations and fundraising duties, prepare budgets, and direct activities to ensure that everything functions properly.

In small libraries or information centers, librarians usually handle all aspects of the work. They read book reviews, publishers' announcements, and catalogues to keep up with current literature and other available resources, and select and purchase materials from publishers, wholesalers, and distributors. Librarians prepare new materials by classifying them by subject matter, and describe books and other library materials so they are easy to find. They supervise assistants who prepare cards, computer records, or other access tools that direct users to resources. In large libraries, librarians often specialize in a single area, such as acquisitions, cataloguing, bibliography, reference, special collections, or administration. Teamwork is increasingly important to ensure quality service to the public.

Librarians also compile lists of books, periodicals, articles, and audiovisual materials on particular subjects; analyze collections; and recommend materials. They collect and organize books, pamphlets, manuscripts, and other materials in a specific field, such as rare books, genealogy, or music. In addition, they coordinate programs such as storytelling for children, and literacy skills and book talks for adults; conduct classes; publicize services; provide reference help; write grants; and oversee other administrative matters.

Librarians are classified according to the type of library in which they work—public libraries, school library media centers, academic libraries, and special libraries. Some librarians work with specific groups, such as children, young adults, adults, or the disadvantaged. In school library media centers, librarians help teachers develop curricula, acquire materials for classroom instruction, and sometimes team-teach.

Librarians also work in information centers or libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional associations, medical centers, hospitals, religious organizations, and research laboratories. They build and arrange an organization's information resources, which usually

Librarians need knowledge of a wide variety of scholarly and public information sources in order to aid the public.

are limited to subjects of special interest to the organization. These special librarians can provide vital information services by preparing abstracts and indexes of current periodicals, organizing bibliographies, or analyzing background information and preparing reports on areas of particular interest. For example, a special librarian working for a corporation could provide the sales department with information on competitors or new developments affecting their field.

Many libraries have access to remote databases and maintain their own computerized databases. The widespread use of automation in libraries makes database searching skills important to librarians. Librarians develop and index databases and help train users to develop searching skills for the information they need. Some libraries are forming consortiums with other libraries through electronic mail. This allows patrons to simultaneously submit information requests to several libraries. The Internet also is expanding the amount of available reference information. Librarians must be aware of how to use these resources in order to locate information.

Librarians with computer and information systems skills can work as automated systems librarians, planning and operating computer systems, and information science librarians, designing information storage and retrieval systems and developing procedures for collecting, organizing, interpreting, and classifying information. These librarians analyze and plan for future information needs. (See computer support specialists and systems administrators, and systems analysts, computer scientists, and database administrators elsewhere in the *Handbook*.) The increased use of automated information systems enables librarians to focus on administrative and budgeting responsibilities, grant writing, and specialized research requests, while delegating more technical and user services responsibilities to technicians. (See library technicians elsewhere in the *Handbook*.)

Increasingly, librarians apply their information management and research skills to arenas outside of libraries—for example, database development, reference tool development, information systems, publishing, Internet coordination, marketing, and training of database users. Entrepreneurial librarians sometimes start their own consulting practices, acting as freelance librarians or information brokers and providing services to other libraries, businesses, or government agencies.

Working Conditions

Librarians spend a significant portion of time at their desks or in front of computer terminals; extended work at video display terminals can cause eyestrain and headaches. Assisting users in obtaining information for their jobs, recreational purposes, and other tasks can be challenging and satisfying; at the same time, working with users under deadlines can be demanding and stressful. Some librarians lift and carry books, and some climb ladders to reach high stacks. Librarians in small organizations sometimes shelve books themselves.

More than 2 out of 10 librarians work part time. Public and college librarians often work weekends and evenings, and have to work some holidays. School librarians usually have the same workday schedule as classroom teachers and similar vacation schedules. Special librarians usually work normal business hours, but in fast-paced industries—such as advertising or legal services—they can work longer hours during peak times.

Employment

Librarians held about 149,000 jobs in 2000. Most were in school and academic libraries; others were in public and special libraries. A small number of librarians worked for hospitals and religious organizations. Others worked for governments.

Training, Other Qualifications, and Advancement

A master's degree in Library Science (MLS) is necessary for librarian positions in most public, academic, and special libraries, and in some school libraries. The Federal Government requires an MLS or the equivalent in education and experience. Many colleges and universities offer MLS programs, but employers often prefer graduates of the approximately 56 schools accredited by the American Library Association. Most MLS programs require a bachelor's degree; any liberal arts major is appropriate.

Most MLS programs take 1 year to complete; others take 2. A typical graduate program includes courses in the foundations of library and information science, including the history of books and printing, intellectual freedom and censorship, and the role of libraries and information in society. Other basic courses cover material selection and processing, the organization of information, reference tools and strategies, and user services. Courses are adapted to educate librarians to use new resources brought about by advancing technology such as on-line reference systems, Internet search methods, and automated circulation systems. Course options can include resources for children or young adults; classification, cataloguing, indexing, and abstracting; library administration; and library automation. Computer-related coursework is an increasingly important part of an MLS degree. Some programs offer interdisciplinary degrees combining technical coursework in information science with traditional training in library science.

An MLS provides general preparation for library work, but some individuals specialize in a particular area such as reference, technical services, or children's services. A Ph.D. degree in library and information science is advantageous for a college teaching position, or a top administrative job in a college or university library or large library system.

In special libraries, an MLS usually is also required. In addition, most special librarians supplement their education with knowledge of the subject specialization, sometimes earning a master's, doctoral, or professional degree in the subject. Subject specializations include medicine, law, business, engineering, and the natural and social sciences. For example, a librarian working for a law firm may also be a licensed attorney, holding both library science and law degrees. In some jobs, knowledge of a foreign language is needed.

State certification requirements for public school librarians vary widely. Most States require school librarians, often called library media specialists, to be certified as teachers and have had courses in library science. An MLS is needed in some cases, perhaps with a library media specialization, or a master's in education with a

specialty in school library media or educational media. Some States require certification of public librarians employed in municipal, county, or regional library systems.

Librarians participate in continuing training once they are on the job to keep abreast of new information systems brought about by changing technology.

Experienced librarians can advance to administrative positions, such as department head, library director, or chief information officer.

Job Outlook

Employment of librarians is expected to grow more slowly than the average for all occupations over the 2000-10 period. The increasing use of computerized information storage and retrieval systems continues to contribute to slow growth in the demand for librarians. Computerized systems make cataloguing easier, which library technicians now handle. In addition, many libraries are equipped for users to access library computers directly from their homes or offices. These systems allow users to bypass librarians and conduct research on their own. However, librarians are needed to manage staff, help users develop database searching techniques, address complicated reference requests, and define users' needs. Despite expectations of slower-than-average employment growth, the need to replace librarians as they retire will result in numerous additional job openings.

Applicants for librarian jobs in large metropolitan areas, where most graduates prefer to work, usually face competition; those willing to work in rural areas should have better job prospects. Opportunities will be best for librarians outside traditional settings. Nontraditional library settings include information brokers, private corporations, and consulting firms. Many companies are turning to librarians because of their research and organizational skills, and knowledge of computer databases and library automation systems. Librarians can review vast amounts of information and analyze, evaluate, and organize it according to a company's specific needs. Librarians also are hired by organizations to set up information on the Internet. Librarians working in these settings may be classified as systems analysts, database specialists and trainers, webmasters or web developers, or LAN (local area network) coordinators.

Earnings

Salaries of librarians vary according to the individual's qualifications and the type, size, and location of the library. Librarians with primarily administrative duties often have greater earnings. Median annual earnings of librarians in 2000 were $41,700. The middle 50 percent earned between $32,840 and $52,110. The lowest 10 percent earned less than $25,030, and the highest 10 percent earned more than $62,990. Median annual earnings in the industries employing the largest numbers of librarians in 2000 were as follows:

Elementary and secondary schools	$43,320
Colleges and universities	43,050
Local government, except education and hospitals	38,370

The average annual salary for all librarians in the Federal Government in nonsupervisory, supervisory, and managerial positions was $63,651 in 2001.

Related Occupations

Librarians play an important role in the transfer of knowledge and ideas by providing people with access to the information they need and want. Jobs requiring similar analytical, organizational, and communicative skills include archivists, curators, and museum technicians; and computer and information scientists, research. The management aspect of a librarian's work is similar to the work of managers in a variety of business and government settings. School librarians have many duties similar to those of school teachers. Other jobs requiring the computer skills of some librarians include database administrators and computer systems analysts.

Sources of Additional Information

Information on librarianship, including information on scholarships or loans, is available from the American Library Association. For a listing of accredited library education programs, check their homepage.

➤ American Library Association, Office for Human Resource Development and Recruitment, 50 East Huron St., Chicago, IL 60611. Internet: **http://www.ala.org**

For information on a career as a special librarian, write to:

➤ Special Libraries Association, 1700 18th St. NW., Washington, DC 20009.

Information on graduate schools of library and information science can be obtained from:

➤ Association for Library and Information Science Education, P.O. Box 7640, Arlington, VA 22207. Internet: **http://www.alise.org**

For information on a career as a law librarian, scholarship information, and a list of ALA-accredited schools offering programs in law librarianship, contact:

➤ American Association of Law Libraries, 53 West Jackson Blvd., Suite 940, Chicago, IL 60604. Internet: **http://www.aallnet.org**

For information on employment opportunities as a health sciences librarian, scholarship information, credentialing information, and a list of MLA-accredited schools offering programs in health sciences librarianship, contact:

➤ Medical Library Association, 6 N. Michigan Ave., Suite 300, Chicago, IL 60602. Internet: **http://www.mlanet.org**

Information on acquiring a job as a librarian with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number, or call (912) 757-3000; Federal Relay Service (800) 877-8339. The first number is not tollfree and charges may result. Information also is available on the Internet: **http://www.usajobs.opm.gov**.

Information concerning requirements and application procedures for positions in the Library of Congress can be obtained directly from:

➤ Human Resources Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540-2231.

State library agencies can furnish information on scholarships available through their offices, requirements for certification, and general information about career prospects in the State. Several of these agencies maintain job hotlines reporting openings for librarians.

State departments of education can furnish information on certification requirements and job opportunities for school librarians.

Many library science schools offer career placement services to their alumni and current students. Some allow nonaffiliated students and jobseekers to use their services.

Library Technicians

(O*NET 25-4031.00)

Significant Points

- Training requirements range from a high school diploma to an associate or bachelor's degree, but computer skills are needed for many jobs.
- Increasing use of computerized circulation and information systems should spur job growth, but budget constraints of many libraries should moderate growth.
- Employment should grow rapidly in special libraries as growing numbers of professionals and other workers use those libraries.

Nature of the Work

Library technicians help librarians acquire, prepare, and organize material, and assist users in finding information. Library technicians usually work under the supervision of a librarian, although they work independently in certain situations. Technicians in small libraries handle a range of duties; those in large libraries usually specialize. As libraries increasingly use new technologies—such as CD-ROM, the Internet, virtual libraries, and automated databases—the duties of library technicians will expand and evolve accordingly. Library technicians are assuming greater responsibilities, in some cases taking on tasks previously performed by librarians. (See librarians elsewhere in the *Handbook.*)

Depending on the employer, library technicians can have other titles, such as library technical assistant or media aide. Library technicians direct library users to standard references, organize and maintain periodicals, prepare volumes for binding, handle interlibrary loan requests, prepare invoices, perform routine cataloguing and coding of library materials, retrieve information from computer databases, and supervise support staff.

The widespread use of computerized information storage and retrieval systems has resulted in technicians handling more technical and user services—such as entering catalogue information into the library's computer—that were once performed by librarians. Technicians assist with customizing databases. In addition, technicians instruct patrons how to use computer systems to access data. The increased automation of recordkeeping has reduced the amount of clerical work performed by library technicians. Many libraries now offer self-service registration and circulations with computers, decreasing the time library technicians spend manually recording and inputting records.

Some library technicians operate and maintain audiovisual equipment, such as projectors, tape recorders, and videocassette recorders, and assist users with microfilm or microfiche readers. They also design posters, bulletin boards, or displays.

Library technicians in school libraries encourage and teach students to use the library and media center. They also help teachers obtain instructional materials and assist students with special assignments. Some work in special libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional societies, medical centers, and research laboratories, where they conduct literature searches, compile bibliographies, and prepare abstracts, usually on subjects of particular interest to the organization.

To extend library services to more patrons, many libraries operate bookmobiles. Bookmobile drivers take trucks stocked with books to designated sites on a regular schedule. Bookmobiles serve community organizations such as shopping centers, apartment complexes, schools, and nursing homes. They also may be used to extend library service to patrons living in remote areas. Depending on local conditions, drivers may operate a bookmobile alone or may be accompanied by another library employee.

When working alone, the drivers answer patrons' questions, receive and check out books, collect fines, maintain the book collection, shelve materials, and occasionally operate audiovisual equipment to show slides or films. They participate and may assist in planning programs sponsored by the library such as reader advisory programs, used book sales, or outreach programs. Bookmobile drivers keep track of their mileage, the materials lent out, and the amount of fines collected. In some areas, they are responsible for maintenance of the vehicle and any photocopiers or other equipment in it. They record statistics on circulation and the number of people visiting the bookmobile. Drivers also may record requests for special items from the main library and arrange for the materials to be mailed or delivered to a patron during the next scheduled visit. Many bookmobiles are equipped with personal computers and CD-ROM systems linked to the main library system; this allows bookmobile drivers to reserve or locate books immediately. Some bookmobiles now offer Internet access to users.

Some library technicians operate and maintain audio-visual equipment, such as projectors, tape recorders, and videocassette recorders, and assist users with audio-visual materials.

Working Conditions

Technicians answer questions and provide assistance to library users. Those who prepare library materials sit at desks or computer terminals for long periods and can develop headaches or eyestrain from working with video display terminals. Some duties, like calculating circulation statistics, can be repetitive and boring. Others, such as performing computer searches using local and regional library networks and cooperatives, can be interesting and challenging. Library technicians may lift and carry books, and climb ladders to reach high stacks.

Library technicians in school libraries work regular school hours. Those in public libraries and college and university (academic) libraries also work weekends, evenings and some holidays. Library technicians in special libraries usually work normal business hours, although they often work overtime as well.

The schedules of bookmobile drivers depend on the size of the area being served. Some of these workers go out on their routes every day, while others go only on certain days. On these other days, they work at the library. Some also work evenings and weekends to give patrons as much access to the library as possible. Because bookmobile drivers may be the only link some people have to the library, much of their work is helping the public. They may assist handicapped or elderly patrons to the bookmobile, or shovel snow to assure their safety. They may enter hospitals or nursing homes to deliver books to patrons who are bedridden.

Employment

Library technicians held about 109,000 jobs in 2000. Most worked in school, academic, or public libraries. Some worked in hospitals and religious organizations. The Federal Government, primarily

the U.S. Department of Defense and the U.S, Library of Congress, and State and local governments also employed library technicians.

Training, Other Qualifications, and Advancement
Training requirements for library technicians vary widely, ranging from a high school diploma to specialized postsecondary training. Some employers hire individuals with work experience or other training; others train inexperienced workers on the job. Other employers require that technicians have an associate or bachelor's degree. Given the rapid spread of automation in libraries, computer skills are needed for many jobs. Knowledge of databases, library automation systems, online library systems, online public access systems, and circulation systems is valuable.

Some 2-year colleges offer an associate of arts degree in library technology. Programs include both liberal arts and library-related study. Students learn about library and media organization and operation, and how to order, process, catalogue, locate, and circulate library materials and work with library automation. Libraries and associations offer continuing education courses to keep technicians abreast of new developments in the field.

Library technicians usually advance by assuming added responsibilities. For example, technicians often start at the circulation desk, checking books in and out. After gaining experience, they may become responsible for storing and verifying information. As they advance, they may become involved in budget and personnel matters in their department. Some library technicians advance to supervisory positions and are in charge of the day-to-day operation of their department.

Many bookmobile drivers are required to have a commercial driver's license.

Job Outlook
Employment of library technicians is expected to grow about as fast as the average for all occupations through 2010. In addition to employment growth, some job openings will result from the need to replace library technicians who transfer to other fields or leave the labor force.

The increasing use of library automation is expected to spur job growth among library technicians. Computerized information systems have simplified certain tasks, such as descriptive cataloguing, which can now be handled by technicians instead of librarians. For example, technicians can now easily retrieve information from a central database and store it in the library's computer. Although efforts to contain costs could dampen employment growth of library technicians in school, public, and college and university libraries, cost containment efforts could also result in more hiring of library technicians than librarians. Growth in the number of professionals and other workers who use special libraries should result in good job opportunities for library technicians in those settings.

Earnings
Median annual earnings of library technicians in 2000 were $23,170. The middle 50 percent earned between $17,820 and $29,840. The lowest 10 percent earned less than $13,810, and the highest 10 percent earned more than $35,660. Median annual earnings in the industries employing the largest numbers of library technicians in 2000 were as follows:

Colleges and universities	$25,320
Local government	22,910
Elementary and secondary schools	21,120

Salaries of library technicians in the Federal Government averaged $33,224 in 2001.

Related Occupations
Library technicians perform organizational and administrative duties. Workers in other occupations with similar duties include library assistants, clerical; information and record clerks; and medical records and health information technicians.

Sources of Additional Information
For information on training programs for library/media technical assistants, write to:
➤ American Library Association, Office for Human Resource Development and Recruitment, 50 East Huron St., Chicago, IL 60611. Internet: **http://www.ala.org**

Information on acquiring a job as a library technician with the Federal Government may be obtained from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number, or call (912) 757-3000; Federal Relay Service (800) 877-8339. The first number is not tollfree and charges may result. Information also is available on the Internet: **http://www.usajobs.opm.gov**.

Information concerning requirements and application procedures for positions in the Library of Congress can be obtained directly from:
➤ Human Resources Office, Library of Congress, 101 Independence Ave. SE., Washington, DC 20540-2231.

State library agencies can furnish information on requirements for technicians, and general information about career prospects in the State. Several of these agencies maintain job hotlines reporting openings for library technicians.

State departments of education can furnish information on requirements and job opportunities for school library technicians.

Probation Officers and Correctional Treatment Specialists

(O*NET 21-1092.00)

Significant Points

- Probation officers and correctional treatment specialists work with criminal offenders, some of whom may be dangerous.
- A bachelor's degree in social work, criminal justice, or a related field usually is required.
- Good employment opportunities are expected.

Nature of the Work
Many people who are convicted of crimes are placed on probation instead of being sent to prison. During probation, offenders must stay out of trouble and meet various other requirements. Probation officers, who also may be referred to as community supervision officers in some States, supervise people who have been placed on probation. Parole officers perform many of the same duties that probation officers perform. However, parole officers supervise offenders who have been released from prison on parole to ensure that they comply with the conditions of their parole. In some States, the job of parole and probation officer is combined.

Probation and parole officers supervise offenders on probation or parole through personal contact with the offender and his or her family. Some offenders are required to wear an electronic device so that probation officers can monitor their activities. Officers may arrange for offenders to get substance abuse rehabilitation or job training. They also attend court hearings to update the court on the

offender's compliance with the terms of his or her sentence and on the offender's efforts at rehabilitation.

Probation officers also spend much of their time working for the courts. They investigate the background of offenders brought before the court, write presentence reports, and make sentencing recommendations for each offender. Officers review sentencing recommendations with offenders and their families before submitting them to the court. Officers may be required to testify in court as to their findings and recommendations.

Probation officers usually work with either adults or juveniles exclusively. Only in small, usually rural jurisdictions do probation officers counsel both adults and juveniles. Occasionally, in the Federal courts system, probation officers may undertake the job of a pretrial services officer. Pretrial services officers conduct pretrial investigations and make bond recommendations for defendants.

Correctional treatment specialists work in correctional institutions (jails and prisons) or in parole or probation agencies. In jails and prisons, they evaluate the progress of inmates. They also work with inmates, probation officers, and other agencies to develop parole and release plans. Their case reports are provided to the appropriate parole board when their clients are eligible to be released. In addition, they plan educational and training programs to provide offenders with job skills, and counsel offenders either individually or in groups regarding their coping skills, anger management skills, and drug or sexual abuse. They usually write treatment plans and summaries for each client. Correctional treatment specialists working in parole and probation agencies perform many of the same duties as their counterparts who work in correctional institutions. Correctional treatment specialists may also be known as case managers or drug treatment specialists.

The number of cases a probation officer or correctional treatment specialist handles at one time depends on the counseling needs of offenders and the risks they pose. Higher-risk offenders and those who need a greater amount of counseling usually command more of the officer's time and resources. Caseload size also varies by jurisdiction of the agency. Consequently, officers may handle from 20 to more than 300 active cases at a time.

The nature of the work of many probation officers and correctional treatment specialists has been affected by recent changes in the parole and probation system brought about by public debate on the proper role of prisons, probation, and parole. This has resulted in more community involvement on the part of probation and parole officers in many jurisdictions. Instead of requiring offenders to meet officers in their offices, many officers are going into the community to meet the offenders in their homes and at their places of employment or therapy. Probation and parole agencies also are employing the assistance of community organizations, such as religious institutions, neighborhood groups, and local residents, to monitor the behavior of many offenders. The ability to do this additional fieldwork is facilitated by telecommuting methods, such as the use of computers, phones, and faxes. Probation officers also may telecommute from their own homes. Other technological advancements, such as electronic monitoring devices and drug screening, also have assisted probation officers and correctional treatment specialists in supervising and counseling offenders.

A debate also has emerged about privatizing the probation and parole systems. Many services, such as emotional counseling, job training, drug rehabilitation, and urine testing, already are contracted out to private firms. Some States, including Georgia and Tennessee, have already completely privatized some of their probation agencies. Another recent trend in corrections has involved abolishing parole, either altogether or for certain crimes. In some cases, States have placed many restrictions on the types of offenders who can be paroled and on how much of their sentence must be completed before being paroled. In States where parole has been abolished, another form of supervised release has been established.

Probation officers and correctional treatment specialists usually meet with their clients either in their own office or in the field.

Working Conditions

Probation officers and correctional treatment specialists work with criminal offenders, some of whom may be dangerous. In the course of supervising offenders, they usually interact with many other individuals, such as family members and friends of their clients, who may be angry, upset, or difficult to work with. Workers may be assigned to fieldwork in high crime areas or in institutions where there is a risk of violence or communicable diseases. Probation officers and correctional treatment specialists are required to meet many deadlines, most of which are imposed by courts, which contributes to their heavy workloads. All of these factors contribute to a stressful work environment. Although the high stress levels can make these jobs very difficult at times, they also can be very rewarding. Many workers obtain personal satisfaction from counseling members of their community and helping them become productive citizens.

In addition, extensive travel and fieldwork may be required to meet with offenders who are on probation or parole. Workers may be required to carry a firearm or other weapon for protection. Workers generally work a 40-hour workweek, but some may work longer. They may be on call 24 hours a day to supervise and assist offenders at any time. They also may be required to collect and transport urine samples of offenders for drug testing.

Employment

About 84,000 people were employed as probation officers and correctional treatment specialists in 2000. Most of these workers work for State or local governments. The government level that employs these workers varies by State. In some States, the State government employs all probation officers and correctional treatment specialists, while in other States, local governments are the only employers. In still other States, both levels of government employ these workers. Currently, California and Texas have the highest probation and parole populations. Together these two States account for about one-fourth of the country's correctional supervision population. Jobs also are more plentiful in urban areas.

Training, Other Qualifications, and Advancement
Background qualifications for probation officers and correctional treatment specialists vary by State, but a bachelor's degree in social work, criminal justice, or a related field from a 4-year college or university is usually required. Some States also require 1 year of work experience in a related field or 1 year of graduate study in criminal justice, social work, or psychology to become a probation officer. Some employers may require previous experience or a master's degree in criminal justice, social work, or psychology, of applicants wishing to become correctional treatment specialists.

Applicants usually are administered written, oral, psychological, and physical examinations. Most probation officers and some correctional treatment specialists are required to complete a training program sponsored by their State government or the Federal Government. A certification test also may be required in some States during or after the completion of training.

Prospective probation officers or correctional treatment specialists should be in good physical and emotional condition. Most agencies require applicants to be at least 21 years old and, for Federal employment, not older than 37. Those convicted of felonies may not be eligible for employment in this occupation. Familiarity with the use of computers often is required due to the increasing use of computer technology in probation and parole work. Candidates also should be knowledgeable about laws and regulations pertaining to corrections. Probation officers and correctional treatment specialists should possess strong writing skills due to the large numbers of reports they are required to prepare.

Most probation officers and correctional treatment specialists work as trainees for about 6 months. After successfully completing the training period, workers obtain a permanent position. A typical agency has several levels of probation and parole officers and correctional treatment specialists, as well as supervisors. A graduate degree, such as a master's degree in criminal justice, social work, or psychology, may be helpful for advancement.

Job Outlook
This occupation is not attractive to some potential entrants due to relatively low earnings, heavy workloads, and high stress levels. Therefore, the number of entrants to the occupation may not be enough to fill all expected openings, resulting in good employment opportunities over the projection period.

Employment of probation officers and correctional treatment specialists is projected to grow faster than the average for all occupations through 2010. Despite recent decreases in the crime rate, vigorous law enforcement is expected to result in a continuing increase in the prison population. Overcrowding in prisons also has increased the probation population, as judges and prosecutors search for alternate forms of punishments, such as electronic monitoring and day reporting centers. The number of offenders released on parole is expected to increase to create room for other offenders in prison. The increasing prison, parole, and probation populations should spur more demand for probation and parole officers and correctional treatment specialists.

In addition to openings due to growth, many openings will be created by replacement needs, especially openings due to the large number of these workers who are expected to retire over the projection period.

The job outlook depends on the amount of government funding that is allocated to corrections, and especially to probation systems. Although community supervision is far less expensive than keeping offenders in prison, a change in political trends toward more imprisonment and away from community supervision could result in reduced employment opportunities.

Earnings
Median annual earnings of probation officers and correctional treatment specialists in 2000 were $38,150. The middle 50 percent earned between $30,270 and $49,030. The lowest 10 percent earned less than $25,010, and the highest 10 percent earned more than $59,010. In 2000, median annual earnings for probation officers and correctional treatment specialists employed in State government were $36,980; those employed in local government earned $40,820. Higher wages tend to be found in urban areas.

Related Occupations
Probation officers and correctional treatment specialists counsel criminal offenders as they re-enter society. Other occupations that involve similar responsibilities include social workers, social and human service assistants, and counselors.

Probation officers and correctional treatment also play a major role in maintaining public safety. Other occupations related to corrections and law enforcement include police and detectives, correctional officers, and firefighting occupations.

Sources of Additional Information
For information about criminal justice job opportunities in your area, contact your State's Department of Corrections, Criminal Justice, or Probation.

Further information about probation officers and correctional treatment specialists is available from:

➤ The American Probation and Parole Association, P.O. Box 11910, Lexington, KY 40578-1910. Internet: **http://www.appa-net.org**

Social and Human Service Assistants

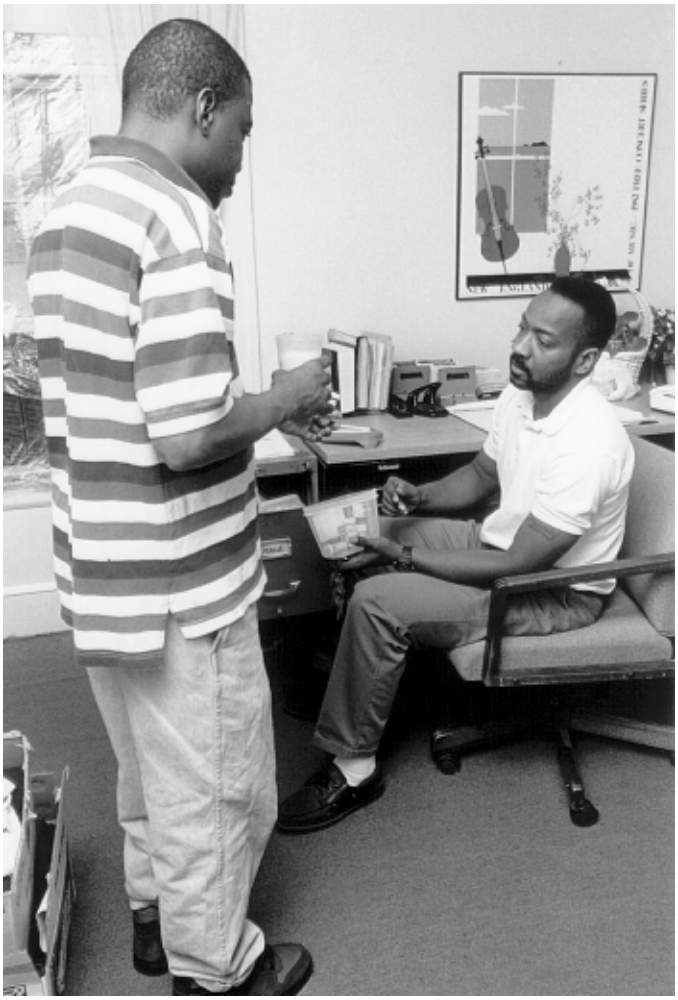
(O*NET 21-1093.00)

Significant Points

- While a bachelor's degree usually is not required, employers increasingly seek individuals with relevant work experience or education beyond high school.
- Social and human service assistants are projected to be among the fastest growing occupations.
- Job opportunities should be excellent, particularly for applicants with appropriate postsecondary education, but pay is low.

Nature of the Work
Social and human service assistant is a generic term for people with various job titles, including human service worker, case management aide, social work assistant, community support worker, mental health aide, community outreach worker, life skill counselor, or gerontology aide. They usually work under the direction of professionals from a variety of fields, such as nursing, psychiatry, psychology, rehabilitative or physical therapy, or social work. The amount of responsibility and supervision they are given varies a great deal. Some have little direct supervision; others work under close direction.

Social and human service assistants provide direct and indirect client services. They assess clients' needs, establish their eligibility for benefits and services, and help clients obtain them. They examine financial documents such as rent receipts and tax returns to determine whether the client is eligible for Food Stamps, Medicaid, welfare, and other human service programs. They also arrange for transportation and escorts, if necessary, and provide emotional



Social and human service assistants help patients with daily activities in adult daycare centers and rehabilitation programs.

support. Social and human service assistants monitor and keep case records on clients and report progress to supervisors and case managers. They also may transport or accompany clients to group meal sites, adult daycare centers, or doctors' offices; telephone or visit clients' homes to make sure services are being received; or help resolve disagreements, such as those between tenants and landlords. They also may help some clients complete insurance or medical forms, as well as applications for financial assistance, and may assist others with daily living needs.

Social and human service assistants play a variety of roles in a community. They may organize and lead group activities, assist clients in need of counseling or crisis intervention, or administer a food bank or emergency fuel program. In halfway houses, group homes, and government-supported housing programs, they assist adults who need supervision with personal hygiene and daily living skills. They review clients' records, ensure that they take correct doses of medication, talk with family members, and confer with medical personnel and other caregivers to gain better insight into clients' backgrounds and needs. Social and human service assistants also provide emotional support and help clients become involved in their own well-being, in community recreation programs, and in other activities.

In psychiatric hospitals, rehabilitation programs, and outpatient clinics, social and human service assistants work with professional care providers, such as psychiatrists, psychologists, and social workers, to help clients master everyday living skills, to teach them how to communicate more effectively, and to get along better with others. They support the client's participation in a treatment plan, such as individual or group counseling or occupational therapy.

Working Conditions

Working conditions of social and human service assistants vary. Some work in offices, clinics, and hospitals, while others work in group homes, shelters, sheltered workshops, and day programs. Many spend their time in the field visiting clients. Most work a 40-hour week, although some work in the evening and on weekends.

The work, while satisfying, can be emotionally draining. Understaffing and relatively low pay may add to the pressure. Turnover is reported to be high, especially among workers without academic preparation for this field.

Employment

Social and human service assistants held about 271,000 jobs in 2000. Approximately half worked in private social or human services agencies, offering a variety of services, including adult daycare, group meals, crisis intervention, counseling, and job training. Many social and human service assistants supervised residents of group homes and halfway houses. About one-quarter were employed by State and local governments, primarily in public welfare agencies and facilities for mentally disabled and developmentally challenged individuals. Social and human service assistants also held jobs in clinics, detoxification facilities, community mental health centers, psychiatric hospitals, day-treatment programs, and sheltered workshops.

Training, Other Qualifications, and Advancement

While a bachelor's degree usually is not required for entry into this occupation, employers increasingly seek individuals with relevant work experience or education beyond high school. Certificates or associate degrees in subjects such as social work, human services, gerontology, or one of the social or behavioral sciences meet most employers' requirements.

Human services programs have a core curriculum that trains students to observe patients and record information, conduct patient interviews, implement treatment plans, employ problem-solving techniques, handle crisis intervention matters, and use proper case management and referral procedures. General education courses in liberal arts, sciences, and the humanities also are part of the curriculum. Many degree programs require completion of a supervised internship.

Educational attainment often influences the kind of work employees may be assigned and the degree of responsibility that may be entrusted to them. For example, workers with no more than a high school education are likely to receive extensive on-the-job training to work in direct-care services, while employees with a college degree might be assigned to do supportive counseling, coordinate program activities, or manage a group home. Social and human service assistants with proven leadership ability, either from previous experience or as a volunteer in the field, often have greater autonomy in their work. Regardless of the academic or work background of employees, most employers provide some form of in-service training, such as seminars and workshops, to their employees.

Hiring requirements in group homes tend to be more stringent than those in other settings. For example, employers may require employees to have a valid driver's license or to submit to a criminal background investigation.

Employers try to select applicants who have effective communication skills, a strong sense of responsibility, and the ability to manage time effectively. Many human services jobs involve direct contact with people who are vulnerable to exploitation or

mistreatment; therefore, patience, understanding, and a strong desire to help others are highly valued characteristics.

Formal education almost always is necessary for advancement. In general, advancement requires a bachelor's or master's degree in counseling, rehabilitation, social work, human services, psychology, or a related field.

Job Outlook

Job opportunities for social and human service assistants are expected to be excellent, particularly for applicants with appropriate postsecondary education. The number of social and human service assistants is projected to grow much faster than the average for all occupations between 2000 and 2010—ranking among the most rapidly growing occupations. The need to replace workers who move into new positions due to advancement or retirement or for other reasons will create many additional job opportunities. This occupation, however, is not attractive to everyone. It can be draining emotionally, and the pay is relatively low. There will be more competition for jobs in urban areas than in rural areas, but qualified applicants should have little difficulty finding employment.

Faced with rapid growth in the demand for social and human services, employers are developing new strategies for delivering and funding services. Many employers increasingly rely on social and human service assistants to undertake greater responsibility in delivering services to clients.

Opportunities are expected to be best in job-training programs, residential care facilities, and private social service agencies, which include such services as adult daycare and meal delivery programs. Demand for these services will expand with the growing elderly population, who are more likely to need services. In addition, social and human service assistants will continue to be needed to provide services to pregnant teenagers, the homeless, the mentally disabled and developmentally challenged, and those with substance-abuse problems.

Job-training programs also are expected to require additional social and human service assistants. As social welfare policies shift focus from benefit-based programs to work-based initiatives, there will be more demand for people to teach job skills to the people who are new to, or returning to, the workforce. Additionally, streamlined and downsized businesses create demand for persons with job-retraining expertise. Social and human service assistants will help companies to cope with new modes of conducting business and employees to master new job skills.

Residential care establishments should face increased pressures to respond to the needs of the chronically and mentally ill. Many of these patients have been deinstitutionalized and lack the knowledge or the ability to care for themselves. Also, more community-based programs, supported independent-living sites, and group residences are expected to be established to house and assist the homeless and the chronically and mentally ill. Because more substance abusers are being sent to treatment programs instead of to prison, employment of social and human service assistants in substance abuse programs will also grow.

The number of jobs for social and human service assistants will grow more rapidly than overall employment in State and local governments. State and local governments employ many of their social and human service assistants in corrections and public-assistance departments. Although employment in corrections departments is growing, employment of social and human service assistants is not expected to grow as rapidly as employment in other corrections jobs, such as correctional officers. Public-assistance programs have been employing more social and human service assistants in an attempt to employ fewer social workers, who are more educated, and thus more highly paid.

Earnings

Median annual earnings of social and human service assistants were $22,330 in 2000. The middle 50 percent earned between $17,820 and $27,930. The top 10 percent earned more than $35,220, while the lowest 10 percent earned less than $14,660.

Median annual earnings in the industries employing the largest numbers of social and human service assistants in 2000 were:

State government, except education and hospitals	$27,130
Local government, except education and hospitals	25,320
Social services, not elsewhere classified	21,820
Individual and family services	21,350
Residential care	19,880

Related Occupations

Workers in other occupations that require skills similar to those of social and human service assistants include social workers; clergy; counselors; childcare workers; occupational-therapist assistants and aides; physical-therapist assistants and aides; and nursing, psychiatric, and home-health aides.

Sources of Additional Information

Information on academic programs in human services may be found in most directories of 2- and 4-year colleges, available at libraries or career counseling centers.

For information on programs and careers in human services, contact:

➤ National Organization for Human Service Education, University of Rhode Island, Quinn 107-URI, Kingston, RI 02881. Internet: **http://www.nohse.com**

➤ Council for Standards in Human Services Education, Northern Essex Community College, 100 Elliot Way, Haverhill, MA 01830. Internet: **http://www.cshse.com**

Information on job openings may be available from State employment service offices or directly from city, county, or State departments of health, mental health and mental retardation, and human resources.

Social Workers

(O*NET 21-1021.00, 21-1022.00, 21-1023.00)

Significant Points

- While a bachelor's degree is the minimum requirement, a master's degree in social work or a related field has become the standard for many positions.
- Employment is projected to grow faster than average.
- Competition for jobs is expected in cities, but opportunities should be good in rural areas.

Nature of the Work

Social work is a profession for those with a strong desire to help improve people's lives. Social workers help people function the best way they can in their environment, deal with their relationships, and solve personal and family problems.

Social workers often see clients who face a life-threatening disease or a social problem. These problems may include inadequate housing, unemployment, lack of job skills, financial distress, serious illness or disability, substance abuse, unwanted pregnancy, or anti-social behavior. Social workers also assist families that have serious domestic conflicts, including those involving child or spousal abuse.

Through direct counseling, social workers help clients identify their concerns, consider effective solutions, and find reliable resources. Social workers typically consult and counsel clients and arrange for services that can help them. Often, they refer clients to specialists in services such as debt counseling, childcare or eldercare, public assistance, or alcohol or drug rehabilitation. Social workers then follow through with the client to assure that services are helpful and that clients make proper use of the services offered. Social workers may review eligibility requirements, help fill out forms and applications, visit clients on a regular basis, and provide support during crises.

Social workers practice in a variety of settings. In hospitals and psychiatric hospitals, they provide or arrange for a range of support services. In mental health and community centers, social workers provide counseling services on marriage, family, and adoption matters, and they help people through personal or community emergencies, such as dealing with loss or grief or arranging for disaster assistance. In schools, they help children, parents, and teachers cope with problems. In social service agencies, they help people locate basic benefits, such as income assistance, housing, and job training. Social workers also offer counseling to those receiving therapy for addictive or physical disorders in rehabilitation facilities, and to people in nursing homes who are in need of routine living care. In employment settings, they counsel people with personal, family, professional, or financial problems affecting their work performance. Social workers who work in courts and correction facilities evaluate and counsel individuals in the criminal justice system to cope better in society. In private practice, they provide clinical or diagnostic testing services covering a wide range of personal disorders. Social workers working in private practice also counsel clients with mental and emotional problems.

Social workers often provide social services in health-related settings that now are governed by managed care organizations. To contain costs, these organizations are emphasizing short-term intervention, ambulatory and community-based care, and greater decentralization of services.

Most social workers specialize. Although some conduct research or are involved in planning or policy development, most social workers prefer an area of practice in which they interact with clients.

Clinical social workers offer psychotherapy or counseling and a range of diagnostic services in public agencies, clinics, and private practice.

Child welfare or family services social workers may counsel children and youths who have difficulty adjusting socially, advise parents on how to care for disabled children, or arrange for homemaker services during a parent's illness. If children have serious problems in school, child welfare workers may consult with parents, teachers, and counselors to identify underlying causes and develop plans for treatment. Some social workers assist single parents; arrange adoptions; and help find foster homes for neglected, abandoned, or abused children. Child welfare workers also work in residential institutions for children and adolescents.

Child or adult protective services social workers investigate reports of abuse and neglect, and intervene if necessary. They may initiate legal action to remove children from homes and place them temporarily in an emergency shelter or with a foster family.

Mental health social workers provide services for persons with mental or emotional problems. Such services include individual and group therapy, outreach, crisis intervention, social rehabilitation, and training in skills of everyday living. They may also help plan for supportive services to ease patients' return to the community. (Counselors and psychologists, who may provide similar services, are discussed elsewhere in the *Handbook*.)

Social workers may arrange for a variety of services for their clients or provide psychological counseling to them.

Healthcare social workers help patients and their families cope with chronic, acute, or terminal illnesses and handle problems that may stand in the way of recovery or rehabilitation. They may organize support groups for families of patients suffering from cancer, AIDS, Alzheimer's disease, or other illnesses. They also advise family caregivers, counsel patients, and help plan for patients' needs after discharge by arranging for at-home services—from meals-on-wheels to oxygen equipment. Some work on interdisciplinary teams that evaluate certain kinds of patients—geriatric or organ transplant patients, for example.

School social workers diagnose students' problems and arrange needed services, counsel children in trouble, and help integrate disabled students into the general school population. School social workers deal with problems such as student pregnancy, misbehavior in class, and excessive absences. They also advise teachers on how to cope with problem students.

Substance abuse social workers counsel drug and alcohol abusers as they recover from their dependencies. They also arrange for other services that may help clients find employment or get training. They generally are employed in substance abuse treatment and prevention programs.

Criminal justice social workers make recommendations to courts; prepare presentencing assessments; and provide services to prison inmates, parolees, probationers, and their families. (Probation officers and correctional treatment specialists are discussed elsewhere in the *Handbook*.)

Occupational social workers usually work in a corporation's personnel department or health unit. Through employee assistance programs, they help workers cope with job-related pressures or with personal problems that affect the quality of their work. They often offer direct counseling to employees whose performance is hindered by emotional or family problems or substance abuse. They also develop education programs and refer workers to specialized community programs.

Gerontology social workers specialize in services for senior citizens. They run support groups for family caregivers or for the adult children of aging parents. Also, they advise elderly people or family members about the choices in such areas as housing, transportation, and long-term care; they also coordinate and monitor services.

Social work administrators perform overall management tasks in a hospital, clinic, or other setting that offers social worker services.

Social work planners and policy makers develop programs to address such issues as child abuse, homelessness, substance abuse,

poverty, and violence. These workers research and analyze policies, programs, and regulations. They identify social problems and suggest legislative and other solutions. They may help raise funds or write grants to support these programs.

Working Conditions

Full-time social workers usually work a standard 40-hour week; however, some occasionally work evenings and weekends to meet with clients, attend community meetings, and handle emergencies. Some, particularly in voluntary nonprofit agencies, work part time. Social workers usually spend most of their time in an office or residential facility, but also may travel locally to visit clients, meet with service providers, or attend meetings. Some may use one of several offices within a local area in which to meet with clients. The work, while satisfying, can be emotionally draining. Understaffing and large caseloads add to the pressure in some agencies.

Employment

Social workers held about 468,000 jobs in 2000. About 1 out of 3 jobs were in State, county, or municipal government agencies, primarily in departments of health and human services, mental health, social services, child welfare, housing, education, and corrections. Most private sector jobs were in social service agencies, hospitals, nursing homes, home health agencies, and other health centers or clinics. Although most social workers are employed in cities or suburbs, some work in rural areas. The following tabulation shows 2000 employment by type of social worker.

Child, family, and school social workers	281,000
Medical and public health social workers	104,000
Mental health and substance abuse social workers	83,000

Training, Other Qualifications, and Advancement

A bachelor's degree in social work (BSW) degree is the most common minimum requirement to qualify for a job as a social worker; however, majors in psychology, sociology, and related fields may be sufficient to qualify for some entry-level jobs, especially in small community agencies. Although a bachelor's degree is required for entry into the field, an advanced degree has become the standard for many positions. A master's degree in social work (MSW) is necessary for positions in health and mental health settings and typically is required for certification for clinical work. Jobs in public agencies also may require an advanced degree, such as a master's degree in social service policy or administration. Supervisory, administrative, and staff training positions usually require an advanced degree. College and university teaching positions and most research appointments normally require a doctorate in social work (DSW or PhD).

As of 2000, the Council on Social Work Education (CSWE) accredited 421 BSW programs and 139 MSW programs. The Group for the Advancement of Doctoral Education (GADE) listed 71 doctoral programs for PhD's in social work or DSW's (Doctor of Social Work). BSW programs prepare graduates for direct service positions such as caseworker or groupworker. They include courses in social work practice, social welfare policies, human behavior and the social environment, social research methods, social work values and ethics, dealing with a culturally diverse clientele, promotion of social and economic justice, and populations-at-risk. Accredited BSW programs require at least 400 hours of supervised field experience.

Master's degree programs prepare graduates for work in their chosen field of concentration and continue to develop their skills to perform clinical assessments, manage large caseloads, and explore new ways of drawing upon social services to meet the needs of clients. Master's programs last 2 years and include 900 hours of supervised field instruction, or internship. A part-time program may take 4 years. Entry into a master's program does not require a bachelor's in social work, but courses in psychology, biology, sociology, economics, political science, history, social anthropology, urban studies, and social work are recommended. In addition, a second language can be very helpful. Most master's programs offer advanced standing for those with a bachelor's degree from an accredited social work program.

All States and the District of Columbia have licensing, certification, or registration requirements regarding social work practice and the use of professional titles. Although standards for licensing vary by State, a growing number of States are placing greater emphasis on communications skills, professional ethics, and sensitivity for cultural diversity issues. Additionally, the National Association of Social Workers (NASW) offers voluntary credentials. The Academy of Certified Social Workers (ACSW) is granted to all social workers who have met established eligibility criteria. Clinical social workers may earn either the Qualified Clinical Social Worker (QCSW) credential or the advanced credential—Diplomate in Clinical Social Work (DCSW). Social workers holding clinical credentials also may list themselves in the biannual publication of the *NASW Register of Clinical Social Workers*. Credentials are particularly important for those in private practice; some health insurance providers require them for reimbursement.

Social workers should be emotionally mature, objective, and sensitive to people and their problems. They must be able to handle responsibility, work independently, and maintain good working relationships with clients and coworkers. Volunteer or paid jobs as a social work aide offer ways of testing one's interest in this field.

Advancement to supervisor, program manager, assistant director, or executive director of a social service agency or department is possible, but usually requires an advanced degree and related work experience. Other career options for social workers include teaching, research, and consulting. Some also help formulate government policies by analyzing and advocating policy positions in government agencies, in research institutions, and on legislators' staffs.

Some social workers go into private practice. Most private practitioners are clinical social workers who provide psychotherapy, usually paid through health insurance. Private practitioners usually have at least a master's degree and a period of supervised work experience. A network of contacts for referrals also is essential.

Job Outlook

Competition for social worker jobs is stronger in cities where demand for services often is highest, training programs for social workers are prevalent, and interest in available positions is strongest. However, opportunities should be good in rural areas, which often find it difficult to attract and retain qualified staff.

Employment of social workers is expected to increase faster than the average for all occupations through 2010. The elderly population is increasing rapidly, creating greater demand for health and social services, resulting in particularly rapid job growth among gerontology social workers. Social workers also will be needed to help the large baby-boom generation deal with depression and mental health concerns stemming from mid-life, career, or other personal and professional difficulties. In addition, continuing concern about crime, juvenile delinquency, and services for the mentally ill, the mentally retarded, the physically disabled, AIDS patients, and individuals and families in crisis will spur demand for social workers. Many job openings also will stem from the need to replace social workers who leave the occupation.

The number of social workers in hospitals and long-term care facilities will increase in response to the need to provide medical and social services for clients who leave the facility. However, this

need will be shared across several occupations. In an effort to control costs, these facilities increasingly emphasize discharging patients early, applying an interdisciplinary approach to patient care, and employing a broader mix of occupations—including clinical specialists, registered nurses, and health aides—to tend to patient care or client needs.

Social worker employment in home healthcare services is growing, in part because hospitals are releasing patients earlier than in the past. However, the expanding senior population is an even larger factor. Social workers with backgrounds in gerontology are finding work in the growing numbers of assisted-living and senior-living communities.

Employment of social workers in private social service agencies also will grow. However, agencies increasingly will restructure services and hire more lower-paid social and human service assistants instead of social workers. Employment in State and local government may grow somewhat in response to increasing needs for public welfare and family services; however, many of these services will be contracted out to private agencies. Employment in child protection services will grow due to increased concern over the safety of children. Employment levels may fluctuate depending on need and government funding for various social service programs.

Employment of substance abuse social workers also will continue to grow over the projection period. Substance abusers are increasingly being placed into treatment programs instead of being sentenced to prison. As this trend grows, demand will increase for treatment programs and social workers to assist abusers on the road to recovery.

Employment of school social workers is expected to grow due to expanded efforts to respond to rising student enrollments. Moreover, continued emphasis on integrating disabled children into the general school population will lead to more jobs. However, availability of State and local funding will dictate the actual job growth in schools.

Opportunities for social workers in private practice will expand, but this growth will be inhibited to a certain degree by funding cutbacks and by restrictions that managed care organizations place on services. The growing popularity of employee assistance programs also is expected to spur some demand for private practitioners, some of whom provide social work services to corporations on a contractual basis.

Earnings

Median annual earnings of child, family, and school social workers were $31,470 in 2000. The middle 50 percent earned between $24,910 and $40,170. The lowest 10 percent earned less than $20,120, and the top 10 percent earned more than $50,280. Median annual earnings in the industries employing the largest numbers of child, family, and school social workers in 2000 were:

Elementary and secondary schools	$41,700
Local government, except education and hospitals	35,780
State government, except education and hospitals	32,860
Individual and family services	27,170
Residential care	26,780

Median annual earnings of medical and public health social workers were $34,790 in 2000. The middle 50 percent earned between $27,800 and $43,450. The lowest 10 percent earned less than $22,490, and the top 10 percent earned more than $53,160. Median annual earnings in the industries employing the largest numbers of medical and public health social workers in 2000 were:

Hospitals	$40,020
Health and allied services, not elsewhere classified	36,230
Local government, except education and hospitals	35,300
Nursing and personal care facilities	31,580
Individual and family services	29,730

Median annual earnings of mental health and substance abuse social workers were $30,170 in 2000. The middle 50 percent earned between $23,840 and $39,190. The lowest 10 percent earned less than $19,300, and the top 10 percent earned more than $48,750. Median annual earnings in the industries employing the largest numbers of mental health and substance abuse social workers in 2000 were:

Local government, except education and hospitals	$33,950
Hospitals	33,150
Health and allied services, not elsewhere classified	28,270
Individual and family services	28,160
Residential care	26,620

Related Occupations

Through direct counseling or referral to other services, social workers help people solve a range of personal problems. Workers in occupations with similar duties include the clergy, counselors, psychologists, and social and human service assistants.

Sources of Additional Information

For information about career opportunities in social work and voluntary credentials for social workers, contact:

➤ National Association of Social Workers, 750 First St. NE., Suite 700, Washington, DC 20002-4241. Internet: **http://www.naswdc.org**

For a listing of accredited social work programs or to order a *Directory of Colleges and Universities with Accredited Social Work Degree Programs* for a nominal charge, contact:

➤ Council on Social Work Education, 1725 Duke St., Suite 500, Alexandria, VA 22314-3457. Internet: **http://www.cswe.org**

Information on licensing requirements and testing procedures for each State may be obtained from State licensing authorities, or from:

➤ Association of Social Work Boards, 400 South Ridge Pkwy., Suite B, Culpeper, VA 22701. Internet: **http://www.aswb.org**

Teacher Assistants

(O*NET 25-9041.00)

Significant Points

- Approximately 4 in 10 teacher assistants work part time.
- Educational requirements range from a high school diploma to some college training.
- A growing special education population, among other factors, is expected to cause faster than average employment growth.

Nature of the Work

Teacher assistants provide instructional and clerical support for classroom teachers, allowing teachers more time for lesson planning and teaching. Teacher assistants tutor and assist children in learning class material using the teacher's lesson plans, providing students with individualized attention. Teacher assistants also supervise students in the cafeteria, schoolyard, school discipline center, or on field trips. They record grades, set up equipment, and help prepare materials for instruction. Teacher assistants are also called teacher aides or instructional aides. Some refer to themselves as paraeducators.

Some teacher assistants perform exclusively noninstructional or clerical tasks, such as monitoring nonacademic settings. Playground and lunchroom attendants are examples of such assistants.

Teacher assistants work one-on-one or with small groups of students to provide the extra help they may need.

Most teacher assistants, however, perform a combination of instructional and clerical duties. They generally instruct children, under the direction and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing or reinforcing classwork, or helping them find information for reports. At the secondary school level, teacher assistants often specialize in a certain subject, such as math or science. Teacher assistants often take charge of special projects and prepare equipment or exhibits, such as for a science demonstration. Some assistants work in computer laboratories, helping students using computers and educational software programs.

In addition to instructing, assisting, and supervising students, teacher assistants grade tests and papers, check homework, keep health and attendance records, type, file, and duplicate materials. They also stock supplies, operate audiovisual equipment, and keep classroom equipment in order.

Many teacher assistants work extensively with special education students. As schools become more inclusive, integrating special education students into general education classrooms, teacher assistants in general education and special education classrooms increasingly assist students with disabilities. Teacher assistants attend to a disabled student's physical needs, including feeding, teaching good grooming habits, or assisting students riding the school bus. They also provide personal attention to students with other special needs, such as those whose families live in poverty, or students who speak English as a second language, or who need remedial education. Teacher assistants help assess a student's progress by observing performance and recording relevant data.

Teacher assistants also work with infants and toddlers who are disabled or developmentally delayed. Under the guidance of a teacher or therapist, teacher assistants perform exercises or play games to help the child develop physically and behaviorally. Some teacher assistants work with young adults helping them obtain a job or apply for community services for the disabled.

Working Conditions

Approximately 4 in 10 teacher assistants work part time. However, even among full-time workers, nearly half work less than 8 hours per day. Most assistants who provide educational instruction work the traditional 9- to 10-month school year. Teacher assistants work in a variety of settings, including private homes, preschools, or in local government offices working with young adults. But most work in classrooms in elementary, middle, and secondary schools. They also work outdoors supervising recess when weather allows, and they spend much of their time standing, walking, or kneeling.

Seeing students develop and gain appreciation of the joy of learning can be very rewarding. However, working closely with students can be both physically and emotionally tiring. Teacher assistants who work with special education students often perform more strenuous tasks, including lifting, as they help students with their daily routine. Those who perform clerical work may tire of administrative duties, such as copying materials or typing.

Employment

Teacher assistants held almost 1.3 million jobs in 2000. About 80 percent worked in public and private education, mostly in the elementary grades. Approximately half assisted special education teachers in working with children with disabilities. Most of the others worked in child daycare centers and religious organizations.

Training, Other Qualifications, and Advancement

Educational requirements for teacher assistants range from a high school diploma to some college training. Teacher assistants with instructional responsibilities usually require more training than those who do not perform teaching tasks. Increasingly, employers prefer teacher assistants who have some college training. Some teacher assistants are aspiring teachers who are working towards their degree while gaining experience. Many schools require previous experience in working with children. Schools often require a valid driver's license and perform a background check on applicants.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher assistants. However, most teacher assistants receive on-the-job training. Those who tutor and review lessons with students must have a thorough understanding of class materials and instructional methods, and should be familiar with the organization and operation of a school. Teacher assistants also must know how to operate audiovisual equipment, keep records, and prepare instructional materials, as well as have adequate computer skills.

Teacher assistants should enjoy working with children from a wide range of cultural backgrounds, and be able to handle classroom situations with fairness and patience. Teacher assistants also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good writing skills and be able to communicate effectively with students and teachers. Teacher assistants who speak a second language, especially Spanish, are in great demand to communicate with growing numbers of students and parents whose primary language is not English.

About one third of all States have established guidelines or minimum educational standards for the hiring and training of teacher assistants, and an increasing number of States are in the process of implementing them. Although requirements vary by State, most require an individual to have at least a high school diploma or general equivalency degree (G.E.D.), or some college training. In States that have not established guidelines or minimum educational standards, local school districts determine hiring requirements.

Advancement for teacher assistants, usually in the form of higher earnings or increased responsibility, comes primarily with experience or additional education. Some school districts provide time away from the job or tuition reimbursement so that teacher assistants can earn their bachelor's degrees and pursue licensed teaching positions. In return for tuition reimbursement, assistants are often required to teach a certain length of time for the school district.

Job Outlook

Employment of teacher assistants is expected to grow faster than the average for all occupations through 2010. Many school districts

report shortages of teachers. If schools continue to experience problems hiring teachers, the demand for teacher assistants to assist and monitor students and provide teachers with clerical assistance will grow. In addition, despite projections of only moderate increases in overall student enrollments, the number of special education students and those who speak English as a second language are expected to grow more rapidly. Because teacher assistants play a large role in helping students with special needs, the rising number of these students will create additional demand for teacher assistants. In addition to jobs stemming from employment growth, numerous job openings will arise as workers transfer to other occupations, leave the labor force to assume family responsibilities, return to school, or leave for other reasons—characteristic of occupations that require limited formal education and offer relatively low pay.

The number and size of special education programs are growing in response to increasing enrollments of students with disabilities. Federal legislation mandates appropriate education for all children, and emphasizes placing children with disabilities into regular school settings, when possible. Children with special needs require much personal attention, and special education teachers, as well as general education teachers with special education students, rely heavily on teacher assistants.

School reforms that call for more individual instruction should further enhance employment opportunities for teacher assistants. As schools strive to meet new standards, they are hiring more teacher assistants to provide students with the personal instruction and remedial education they need. An increasing number of after-school programs and summer programs also will create new opportunities for teacher assistants.

Demand is expected to vary by region of the country. Where population growth is fastest, such as in areas of the South and West, school enrollments are also rising quickly, resulting in stronger demand for teacher assistants. Teacher assistants, particularly those that can speak a foreign language, are in demand in school systems with large numbers of immigrants.

Earnings

Median annual earnings of teacher assistants in 2000 were $17,350. The middle 50 percent earned between $13,930 and $22,080. The lowest 10 percent earned less than $12,260, and the highest 10 percent earned more than $27,550.

Teacher assistants who work part time ordinarily do not receive benefits. Full-time workers usually receive health coverage and other benefits.

About 4 out of 10 teacher assistants belonged to unions in 2000—mainly the American Federation of Teachers and the National Education Association—which bargain with school systems over wages, hours, and the terms and conditions of employment.

Related Occupations

Teacher assistants who instruct children have duties similar to those of preschool, kindergarten, elementary, middle, and secondary school teachers, special education teachers, and school librarians. However, teacher assistants do not have the same level of responsibility or training. The support activities of teacher assistants and their educational backgrounds are similar to those of childcare workers, library technicians, and library assistants. Teacher assistants who work with children with disabilities perform many of the same functions as occupational therapy assistants and aides.

Sources of Additional Information

For information on teacher assistants, including training and certification, contact:

➤ American Federation of Teachers, Paraprofessional and School Related Personnel Division, 555 New Jersey Ave. NW., Washington, DC 20001. Internet: **http://www.aft.org/psrp**

For information on a career as a teacher assistant, contact:

➤ National Resource Center for Paraprofessionals in Education and Related Services, 6526 Old Main Hill, Utah State University, Logan, UT 84322. Internet: **http://www.nrcpara.org**

School superintendents and State departments of education can provide details about employment requirements.

Teachers—Adult Literacy and Remedial and Self-Enrichment Education

(O*NET 25-3011.00, 25-3021.00)

Significant Points

- The majority of employed adult teachers work part time and receive no benefits; many unpaid volunteers also teach these subjects.
- Opportunities for teachers of English as a Second Language are expected to be very good, as the number of immigrants seeking classes is expected to increase.
- Demand for self-enrichment courses is expected to rise as more people embrace lifelong learning.

Nature of the Work

Adult literacy and remedial education teachers provide adults and out-of-school youths the education needed to read, write, and speak English, and to perform basic math calculations—basic skills that equip them to solve problems well enough to become active participants in our society, to hold a job, and to further their education. Students in adult literacy and remedial education classes are made up of those who dropped out of school or have passed through the school system without an adequate education. It also includes students who want to take the General Educational Development examination, better known as the GED exam. The GED certificate—earned by passing the GED exam—generally is considered the equivalent of a high school diploma. Increasingly, though, the students in adult education classes are immigrants whose native language is not English. In contrast, *self-enrichment teachers*, unlike other adult education teachers, teach courses that students take for personal enrichment, such as cooking, dancing, creative writing, golf or tennis, photography, or personal finance.

Adult literacy and remedial education teachers, more commonly called *adult basic education teachers*, teach basic academic courses in math, geography, history, reading, writing, science, and other areas. They teach these subjects to students 16 years of age and older who have up to an eighth grade level education. Many of these adults have learning disabilities or emotional problems that prevented them from learning effectively in regular school. Because the students often are at different proficiency levels for different subjects, remedial education teachers must make individual assessments beforehand of each student's abilities. The assessment is used in many programs to develop an individualized education plan for each student. Teachers are required to evaluate students periodically to determine if they should be promoted to the next level.

Teachers who teach literacy to non-English speaking students are called *English as a Second Language (ESL)* or English to Speakers of Other Languages (ESOL) teachers. Along with English, ESL

teachers provide survival and life skills instruction, and lessons on math, health, citizenship, and vocational topics. Adult education teachers, particularly ESL teachers, use real-life situations to promote learning. For example, a reading lesson may consist of reading a job application or a lease for an apartment. More advanced students concentrate on writing and conversational skills and more difficult vocabulary. ESL teachers must cope with a wide range of cultures and abilities in their classroom. Some of their students may have a college degree and be quick learners, while others may never have opened a book; and while some may need to be taught the alphabet from scratch, others may only need help with vocabulary.

Literacy and remedial education is taught in small groups or one-on-one. Teachers generally teach all subjects and only rarely specialize. They also may teach a combination of ESL and adult basic education. Attendance for students is mostly voluntary and coursework is rarely graded. Lessons tend to be very practical and put into meaningful contexts. For example, teaching job skills is a major topic in classes, including practicing for an interview, finding a job, following directions, reading a manual, giving opinions, and using technology.

For native-born and foreign-born students who wish to get a GED credential in order to get a job or to go on to college, *GED teachers* help them acquire the necessary knowledge and skills to pass the test. The GED tests students in writing, math, social studies, literature, arts, and sciences. Since most of the students have had some high school, the emphasis in class is on acquiring the knowledge needed to pass the GED test. Going over GED practice tests or GED instruction manuals are the main methods of preparing for the test. However, depending on the expertise of the teacher, some subjects may be taught in more detail.

Self-enrichment teachers teach courses such as how to fix a home computer.

All adult education teachers must prepare lessons beforehand, do any related paperwork, and stay current in their fields. Many new teachers also must learn the latest uses for the computer in literacy classrooms. Computers are increasingly being used to supplement instruction in basic skills and to teach students how to find jobs and other information over the Internet.

Working Conditions

Because adult education teachers work with adult students, they do not encounter some of the behavioral or social problems sometimes found with younger students. Adults attend by choice, are highly motivated, and bring years of experience to the classroom—attributes that can make teaching these students rewarding and satisfying. However, teachers in remedial or adult basic education deal with students who may lack effective study skills and self-confidence have learning disabilities, and who may require more attention and patience than other students.

Adult education teachers often feel they are not as respected by education departments as their general education peers. Many work with out-dated computers or in spare rooms with few resources. Funding is rarely adequate and class sizes are often large.

Many adult education teachers work part time. Some have several part-time teaching assignments or work a full-time job in addition to their part-time teaching job, leading to long hours and a hectic schedule. Classes often are held at night or on the weekends to accommodate students who may have a job or family responsibilities.

Employment

Teachers of adult literacy, remedial, and self-enrichment education, held about 252,000 jobs in 2000. About one in five were self-employed. Many additional teachers worked as unpaid volunteers.

Adult literacy, remedial education, and GED teachers and instructors held about 67,000 of the jobs. Many of the jobs are Federally funded with additional funds coming from State and local governments. The education industry employs the majority of these teachers, who work in Adult Learning Centers, libraries, or community colleges. Others work for State and local governments, providing basic education at juvenile detention and corrections institutions, among other places. Others work for job training facilities; nonprofit, religious, and social service organizations; and residential care facilities. An increasing number of remedial and ESL teachers can be found at worksites, paid by employers to teach English and math to workers.

A total of 186,000 jobs were held by self-enrichment teachers in 2000. Most of them worked in adult continuing education programs sponsored by the local government or an education institution. Some worked in amusement and recreation services, dance studios, and civic and social organizations, among many other places.

Training, Other Qualifications, and Advancement

Requirements for teaching adult literacy and remedial education, including ESL and GED preparation, vary by State and by program. Federally funded programs run by State and local governments usually have higher standards than programs run by religious, community, or volunteer organizations. Most State and local governments and education institutions require that adult teachers have at least a bachelor's degree and preferably a Master's degree. Some require an elementary or secondary teaching certificate and a few have recently begun requiring a certificate in ESL or adult education. Teaching experience, especially with adults, also is preferred or required.

Volunteers usually do not need a bachelor's degree, but must attend a preservice training program instead.

Most programs recommend that adult literacy and remedial education teachers take classes on teaching adults, using technology to teach, working with learners from a variety of cultures, and teaching adults with learning disabilities. ESL teachers should also have courses on second language acquisition theory and linguistics. In addition, knowledge of the citizenship and naturalization process is very useful. Knowledge of a second language is not necessary to teach ESL students, but can be helpful in understanding the students' difficulties. GED teachers should know what is required to pass the GED and be able to instruct students in the subject matter. Training for literacy volunteers usually consists of effective teaching practices, needs assessment, lesson planning, materials selection, characteristics of adult learners, and cross-cultural awareness.

Adult education teachers must have the ability to work with a variety of cultures, languages, and educational and economic backgrounds. They must be understanding of their students' circumstances and familiar with their concerns. All teachers, both paid and volunteer, should be able to communicate well and be able to motivate their students. Previous experience as a volunteer or an aide in a literacy program is recommended.

Professional development among adult education teachers varies widely. Because of the part-time nature of the job, attendance at classes is difficult for many instructors. Therefore, professional development usually consists of voluntary attendance at workshops, conferences, and seminars 1 or 2 days per year. The Internet is playing a larger role in helping teachers learn to expand approaches and techniques in the classroom. They can now take online courses, join chat groups with other teachers, and research journal articles.

There are very few opportunities for advancement in this profession. Most jobs are part time and offer limited career potential. However, those who do have full-time jobs often do administrative work along with teaching. Others may go into policy work at a nonprofit organization or perform research. The most experienced teachers may mentor new instructors and volunteers.

The main qualification for self-enrichment teachers is expertise in the subject area. A portfolio of one's work may be required. For example, to secure a job teaching a photography course, an applicant would need to show examples of previous work. Self-enrichment teachers should also have good speaking skills and a talent for making the subject interesting.

Job Outlook

Opportunities for jobs as adult literacy, remedial, and self-enrichment education teachers are expected to be very good. Employment is expected to grow about as fast as the average for all occupations through 2010, and a large number of job openings are expected due to the need to replace people who leave the occupation or retire. Turnover is prevalent in this occupation due to its many part-time jobs. In addition, a large number of all types of teachers are expected to retire. Should a shortage of people seeking to enter the teaching profession arise, many of these jobs will be hard to fill.

Much of the growth in employment will be for ESL teachers who will be needed by the increasing number of immigrants and other nonEnglish speakers entering this country. In addition, a greater percentage of immigrants are expected to take ESL classes. With most immigrants going to States such as California, Florida, Texas, and New York, demand will be greatest in these regions. However, parts of the Midwest and Plains States have recently begun to attract large numbers of immigrants, making for especially good opportunities in those areas.

As employers increasingly require a more literate workforce, workers' demand will grow for all types of literacy and remedial classes. The need for basic education and GED teachers is expected to increase despite an increasing emphasis being placed on education. One reason is that the standards that many school districts are imposing to improve elementary and secondary education are causing some students who cannot meet the new criteria for graduation to drop out of school and enroll in adult education classes. Also, while dropout rates have declined for whites and blacks, they remain high for foreign-born Hispanics, who make up an increasing share of the population. Nevertheless, several branches of the military recently have allowed those who have dropped out of school to enlist—as long as they pass the GED first. This is expected to bring in new recruits and create demand for GED teachers.

The demand for literacy and basic education often fluctuates with the economy. When the economy is good and workers are hard to find, employers relax their standards and hire workers without a degree or GED. As the economy softens, more students find they need additional education to get a job. However, adult education classes are often subject to funding level changes, which can cause the number of teaching jobs to fluctuate from year to year. When this happens, volunteers may take the place of paid teachers.

As the baby boomers begin to retire and have more time to take classes and as more people embrace lifelong learning, the need for self-enrichment teachers will grow. Subjects that are not easily researched on the Internet and those that provide hands-on experiences will be in greater demand. Classes on spirituality and self-improvement are expected to be popular along with courses that provide hands-on experiences, like cooking and the arts. Topics related to current trends are always well-received.

Earnings

Median hourly earnings of adult literacy and remedial education teachers and GED instructors were $16.12 in 2000. The middle 50 percent earned between $12.20 and $21.17. The lowest 10 percent earned less than $9.47, and the highest 10 percent earned more than $28.50. Part-time adult literacy and remedial education and GED instructors are generally paid by the hour or by the class and receive no benefits. Full-time teachers are usually paid a salary and receive good benefits if they work for a school system or government.

Self-enrichment teachers also are paid by the hour or the class. Median hourly earnings of self-enrichment teachers were $13.44 in 2000. The middle 50 percent earned between $9.48 and $18.63. The lowest 10 percent earned less than $6.96, and the highest 10 percent earned more than $25.38.

Related Occupations

The work of adult literacy, remedial and self-enrichment teachers is closely related to that of other types of teachers, especially preschool, kindergarten, elementary, middle, and secondary school teachers. In addition, adult literacy and remedial education teachers require a wide variety of skills and aptitudes. They must not only be able to teach and motivate students, including those with learning disabilities, they also must be advisors and trainers. Workers in other occupations that require these aptitudes include special education teachers, counselors, and social workers. Self-enrichment teachers teach a wide variety of subjects that may be related to many other occupations.

Sources of Additional Information

Information on adult literacy and remedial education programs and teacher certification requirements is available from State departments of education, local school districts, and literacy resource centers. Information also may be obtained through local religious and charitable organizations.

For information on Adult Education and Family Literacy programs, contact:

➤ The U.S. Department of Education, Office of Vocational and Adult Education, 4090 MES, 400 Maryland Ave. SW., Washington, DC 20202. Internet: **http://www.ed.gov/offices/OVAE**

For information on teaching English as a Second Language, contact:

➤ The National Center for ESL Literacy Education, 4646 40th St. NW., Washington, DC 20016. Internet: **http://www.cal.org/ncle**

Teachers—Postsecondary

(O*NET 25-1011.00, 25-1021.00, 25-1022.00, 25-1031.00, 25-1032.00, 25-1041.00, 25-1042.00, 25-1043.00, 25-1051.00, 25-1052.00, 25-1053.00, 25-1054.00, 25-1061.00, 25-1062.00, 25-1063.00, 25-1064.00, 25-1065.00, 25-1066.00, 25-1067.00, 25-1069.99, 25-1071.00, 25-1072.00, 25-1081.00, 25-1082.00, 25-1111.00, 25-1112.00, 25-1113.00, 25-1121.00, 25-1122.00, 25-1123.00, 25-1124.00, 25-1125.00, 25-1126.00, 25-1191.00, 25-1192.00, 25-1193.00, 25-1194.00, 25-1199.99)

Significant Points

- College faculty usually need a Ph.D. for full-time, tenure-track positions in 4-year colleges and universities.
- Requirements for postsecondary vocational-technical education teachers include work experience, and formal education ranging from a license or certificate to a college degree.
- The job market in colleges and universities is expected to improve, but many new openings will be for part-time or nontenure track positions.
- Job prospects will continue to be better in certain fields—computer science, engineering, and business, for example—that offer attractive nonacademic job opportunities and attract fewer applicants for academic positions.

Nature of the Work

College and university faculty, who make up the majority of postsecondary teachers, teach and advise nearly 15 million full- and part-time college students and perform a significant part of our Nation's research. Faculty also keep up with developments in their field and consult with government, business, nonprofit, and community organizations.

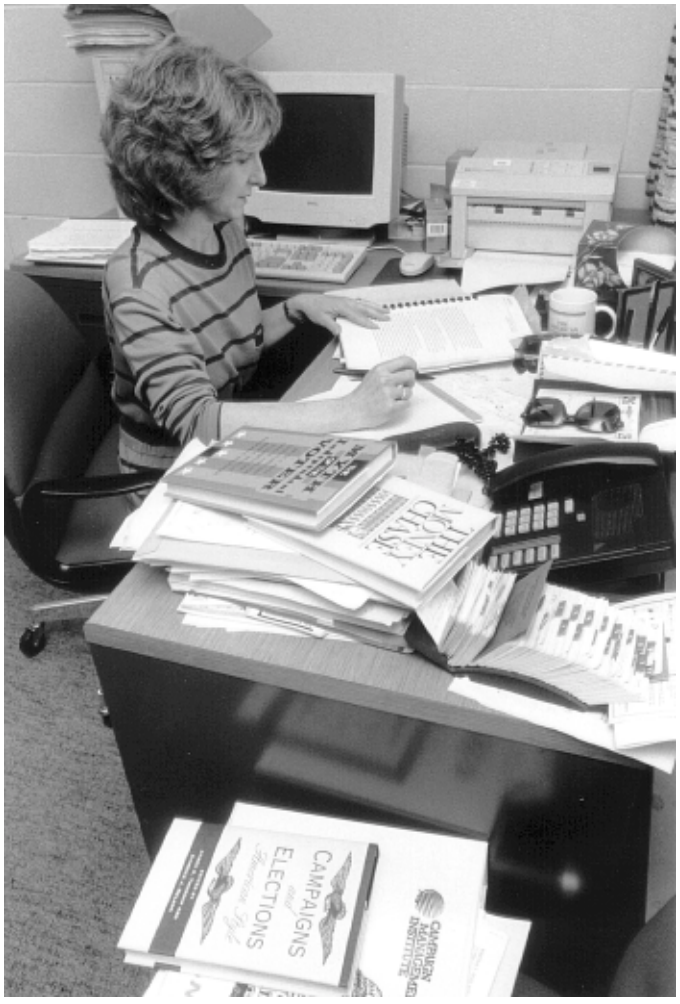
Faculty usually are organized into departments or divisions, based on subject or field. They usually teach several different courses—algebra, calculus, and statistics, for example. They may instruct undergraduate or graduate students, or both. College and university faculty may give lectures to several hundred students in large halls, lead small seminars, or supervise students in laboratories. They prepare lectures, exercises, and laboratory experiments; grade exams and papers; and advise and work with students individually. In universities, they also supervise graduate students' teaching and research. College faculty work with an increasingly varied student population made up of growing shares of part-time, older, and culturally and racially diverse students.

Faculty keep abreast of developments in their field by reading current literature, talking with colleagues, and participating in professional conferences. They also do their own research to expand knowledge in their field. They perform experiments; collect and analyze data; and examine original documents, literature, and other source material. From this process, they arrive at conclusions, and publish their findings in scholarly journals, books, and electronic media.

College and university faculty use technology in all areas of their work. In the classroom, they may use computers—including the Internet; electronic mail; software programs, such as statistical packages; and CD-ROMs—as teaching aids. Faculty post course content, class notes, class schedules, and other information on the Internet. Increasingly, faculty are using sophisticated telecommunications and videoconferencing equipment and the Internet to teach courses to students at remote sites. The use of e-mail, chat rooms, and other techniques has greatly improved communications between students and teachers and among students.

Most faculty members serve on academic or administrative committees that deal with the policies of their institution, departmental matters, academic issues, curricula, budgets, equipment purchases, and hiring. Some work with student and community organizations. Department chairpersons are faculty members who usually teach some courses but have heavier administrative responsibilities.

The proportion of time spent on research, teaching, administrative, and other duties varies by individual circumstance and type of institution. Faculty members at universities normally spend a significant part of their time doing research; those in 4-year colleges, somewhat less; and those in 2-year colleges, relatively little. The teaching load, however, often is heavier in 2-year colleges and somewhat lower at 4-year institutions. Full professors at all types of



Postsecondary teachers keep abreast of developments in their field by reading current literature and talking with colleagues.

institutions usually spend a larger portion of their time conducting research than do assistant professors, instructors, and lecturers.

Postsecondary vocational-technical education teachers provide instruction for occupations that do not require a college degree, such as welder, dental hygienist, x-ray technician, auto mechanic, and cosmetologist. Classes often are taught in an industrial or laboratory setting where students are provided hands-on experience. For example, welding instructors show students various welding techniques, watch them use tools and equipment, and have them repeat procedures until they meet the specific standards required by the trade. Increasingly, vocational-technical education teachers are integrating academic and vocational curriculums so students obtain a variety of skills that can be applied to the "real world."

Vocational-technical education teachers have many of the same responsibilities as college and university faculty. They must prepare lessons, grade papers, attend faculty meetings, and keep abreast of developments in their field. Along with the community colleges, vocational-technical schools also are playing a greater role in students' transition from school to work by helping establish internships and by providing information about prospective employers.

Working Conditions

Postsecondary teachers usually have flexible schedules. They must be present for classes, usually 12 to 16 hours per week, and for faculty and committee meetings. Most establish regular office hours for student consultations, usually 3 to 6 hours per week. Otherwise, teachers are free to decide when and where they will work, and how much time to devote to course preparation, grading, study, research, graduate student supervision, and other activities.

Some teach night and weekend classes. This is particularly true for teachers at 2-year community colleges or institutions with large enrollments of older students who have full-time jobs or family responsibilities. Most colleges and universities require teachers to work 9 months of the year, which allows them the time to teach additional courses, do research, travel, or pursue nonacademic interests during the summer and school holidays. Colleges and universities usually have funds to support research or other professional development needs, including travel to conferences and research sites.

About 3 out of 10 college and university faculty worked part time in 2000. Some part-timers, known as "adjunct faculty," have primary jobs outside of academia—in government, private industry, or nonprofit research—and teach "on the side." Others prefer to work part-time hours or seek full-time jobs but are unable to obtain them due to intense competition for available openings. Some work part time in more than one institution. Many adjunct faculty are not qualified for tenure-track positions because they lack a doctoral degree.

University faculty may experience a conflict between their responsibilities to teach students and the pressure to do research and to publish their findings. This may be a particular problem for young faculty seeking advancement in 4-year research universities. Also, recent cutbacks and the hiring of more part-time faculty have put a greater administrative burden on full-time faculty. Requirements to teach online classes have also added greatly to the workloads of postsecondary teachers. Developing the courses to put online, plus learning how to operate the technology and answering large amounts of e-mail, is very time-consuming.

Employment

Postsecondary teachers held over 1.3 million jobs in 2000. Most were employed in 4-year public colleges and universities, and in community colleges. Postsecondary vocational-technical education teachers also are employed by schools and institutes that specialize in training people in a specific field, such as beauty schools and welding institutes. They also work for State and local governments and job training facilities.

Training, Other Qualifications, and Advancement

Most college and university faculty are in four academic ranks—professor, associate professor, assistant professor, and instructor. These positions usually are considered to be tenure-track positions. A small number of faculty, called lecturers, usually are not on the tenure track.

Most faculty members are hired as instructors or assistant professors. Four-year colleges and universities usually consider doctoral degree holders for full-time, tenure-track positions, but may hire master's degree holders or doctoral candidates for certain disciplines, such as the arts, or for part-time and temporary jobs. In 2-year colleges, master's degree holders fill most full-time positions. However, with increasing competition for available jobs, institutions can be more selective in their hiring practices. Master's degree holders may find it increasingly difficult to obtain employment as they are passed over in favor of candidates holding a Ph.D.

Doctoral programs, including time spent completing a master's degree and a dissertation, take an average of 6 to 8 years of full-time study beyond the bachelor's degree. Some programs, such as the humanities, take longer to complete; others, such as engineering, usually are shorter. Candidates specialize in a subfield of a discipline—for example, organic chemistry, counseling psychology, or European history—but also take courses covering the entire discipline. Programs include 20 or more increasingly specialized courses and seminars plus comprehensive examinations on all major areas of the field. Candidates also must complete a dissertation—a written report on original research in the candidate's major field of study. The dissertation sets forth an original hypothesis or proposes a model and tests it. Students in the natural sciences and engineering usually do laboratory work; in the humanities, they study original documents and other published material. The dissertation, done under the guidance of one or more faculty advisors, usually takes 1 or 2 years of full-time work.

In some fields, particularly the natural sciences, some students spend an additional 2 years on postdoctoral research and study before taking a faculty position. Some Ph.D.'s extend postdoctoral appointments, or take new ones, if they are unable to find a faculty job. Most of these appointments offer a nominal salary.

A program called Preparing Future Faculty, administered by the Association of American Colleges and Universities and the Council of Graduate Schools, offers graduate students at research universities the opportunity to apprentice at local liberal arts colleges. Working with a mentor, the graduate students teach classes and learn how to improve their teaching techniques. They may attend faculty and committee meetings, develop a curriculum, and learn how to balance the teaching, research, and administrative roles that faculty play.

A major step in the traditional academic career is attaining tenure. New tenure-track faculty usually are hired as instructors or assistant professors, and must serve a certain period (usually 7 years) under term contracts. At the end of the contract period, their record of teaching, research, and overall contribution to the institution is reviewed; tenure is granted if the review is favorable. According to the American Association of University Professors, about 63 percent of all full-time faculty held tenure, and about 86 percent were in tenure-track positions, during the 1999-2000 school year. Those denied tenure usually must leave the institution. Tenured professors cannot be fired without just cause and due process. Tenure protects the faculty's academic freedom—the ability to teach and conduct research without fear of being fired for advocating unpopular ideas. It also gives both faculty and institutions the stability

needed for effective research and teaching, and provides financial security for faculty. Some institutions have adopted post-tenure review policies to encourage ongoing evaluation of tenured faculty.

The number of tenure-track positions is expected to decline as institutions seek flexibility in dealing with financial matters and changing student interests. Institutions will rely more heavily on limited term contracts and part-time, or adjunct, faculty, shrinking the total pool of tenured faculty. Some institutions offer limited term contracts to prospective faculty—typically 2-, 3-, or 5-year, full-time contracts. These contracts may be terminated or extended at the end of the period. Institutions are not obligated to grant tenure to these contract holders. In addition, some institutions have limited the percentage of faculty who can be tenured.

Training requirements for postsecondary vocational-technical education teachers vary by State and by subject. In general, teachers need a bachelor's degree or higher plus work or other experience in their field. In some fields, a license or certificate that demonstrates one's qualifications may be all that is required. Teachers update their skills through continuing education to maintain certification. They must also maintain ongoing dialogue with businesses to determine the most current skills needed in the workplace.

For most postsecondary teachers, advancement involves a move into administrative and managerial positions, such as departmental chairperson, dean, and president. At 4-year institutions, such advancement requires a doctoral degree. At 2-year colleges, a doctorate is helpful but not usually required, except for advancement to some top administrative positions. (Deans and departmental chairpersons are covered in the *Handbook* statement on education administrators, while college presidents are included in the *Handbook* statement on top executives.)

Postsecondary teachers should communicate and relate well with students, enjoy working with them, and be able to motivate them. They should have inquiring and analytical minds, and a strong desire to pursue and disseminate knowledge. Additionally, they must be self-motivated and able to work in an environment where they receive little direct supervision.

Job Outlook

The job outlook for postsecondary teachers should be much brighter than it has been in recent years. Employment is expected to grow faster than the average for all occupations through 2010. Projected growth in college and university enrollment over the next decade stems largely from the expected increase in the population of 18 to 24-year olds. Adults returning to college and an increase in foreign-born students also will add to the number of students, particularly in the fastest growing States of California, Texas, Florida, New York, and Arizona. Because many of the students will be from minority groups, demand for minority teachers will be high.

Welfare-to-work policies and the growing need to regularly update one's skills will continue to create new opportunities for postsecondary teachers, particularly at community colleges. There also is expected to be a large number of openings due to the retirements of faculty who were hired in the late '60s and '70s to teach the baby boomers. In contrast, the number of doctorate degrees is projected to rise by only 4 percent over the 2000-10 period, which is sharply lower than the increase over the previous decade. A surplus of Ph.D. candidates in recent years has contributed to intense competition for college faculty jobs.

Although the competition for jobs should ease somewhat, it will remain tight for those seeking tenure-track positions at 4-year colleges and universities. Many of the jobs opening up are expected to be part time or renewable, term appointments. The best job prospects will continue to be in the computer sciences, engineering, and business fields in which jobs outside academia are plentiful. Vocational-technical education teachers also are in short supply in the computer, business, and health-related fields.

Distance learning, particularly over the Internet, is expected to create a number of new jobs for postsecondary teachers, as this method of education reaches students who would not be able to attend a traditional classroom. Those in rural areas and with family responsibilities are embracing distance education as a way to get the education they want, while minimizing the commute to a campus. In addition, employers are expected to use distance learning as a way to update their employees' skills. The Army has recently announced plans to offer distance learning to its troops. Increasing demand for distance education will result in the need for more teachers of online classes, both at traditional colleges and universities and at new online universities.

Earnings

Median annual earnings of postsecondary teachers in 2000 were $46,330. The middle 50 percent earned between $32,270 and $66,460. The lowest 10 percent earned less than $21,700; the highest 10 percent, more than $87,850.

Earnings for college faculty vary according to rank and type of institution, geographic area, and field. According to a 1999-2000 survey by the American Association of University Professors, salaries for full-time faculty averaged $58,400. By rank, the average for professors was $76,200; associate professors, $55,300; assistant professors, $45,600; instructors, $34,700; and lecturers, $38,100. Faculty in 4-year institutions earn higher salaries, on average, than do those in 2-year schools. In 1999-2000, average salaries for faculty in public institutions—$57,700—were lower than those in private independent institutions—$66,300—but higher than those in religiously-affiliated private colleges and universities—$51,300. In fields with high-paying nonacademic alternatives—medicine, law, engineering, and business, among others—earnings exceed these averages. In others—such as the humanities and education—they are lower.

Most faculty members have significant earnings in addition to their base salary, from consulting, teaching additional courses, research, writing for publication, or other employment.

In addition to typical benefits, most college and university faculty enjoy some unique benefits, including access to campus facilities, tuition waivers for dependents, housing and travel allowances, and paid sabbatical leaves. Part-time faculty usually have fewer benefits than do full-time faculty.

Earnings for postsecondary vocational-technical education teachers vary widely by subject, academic credentials, experience, and region of the country. Part-time instructors usually receive few benefits.

Related Occupations

Postsecondary teaching requires the ability to communicate ideas well, motivate students, and be creative. Workers in other occupations that require these skills are teachers—preschool, kindergarten, elementary, middle, and secondary; education administrators; librarians; counselors; writers and editors; public relations specialists; and management analysts. Faculty research activities often are similar to those of scientists, as well as to those of managers and administrators in industry, government, and nonprofit research organizations.

Sources of Additional Information

Professional societies related to a field of study often provide information on academic and nonacademic employment opportunities. Names and addresses of many of these societies appear in statements elsewhere in the *Handbook*.

Special publications on higher education, available in libraries, such as *The Chronicle of Higher Education*, list specific employment opportunities for faculty.

For information on the Preparing Future Faculty program, contact:

➤ Association of American Colleges and Universities, 1818 R St. NW., Washington, DC 20009. Internet: **http://www.aacu-edu.org**

For information on postsecondary vocational-technical education teaching positions, contact State departments of vocational-technical education.

General information on adult and vocational education is available from:

➤ Association for Career and Technical Education, 1410 King St., Alexandria, VA 22314. Internet: **http://www.acteonline.org**

➤ ERIC Clearinghouse on Adult, Career, and Vocational Education, 1900 Kenny Rd., Columbus, OH 43210. Internet: **http://www.ericacve.org**

Teachers—Preschool, Kindergarten, Elementary, Middle, and Secondary

(O*NET 25-2011.00, 25-2012.00, 25-2021.00, 25-2022.00, 25-2023.00, 25-2031.00, 25-2032.00)

Significant Points

- Public school teachers must have at least a bachelor's degree, complete an approved teacher education program, and be licensed.
- Many States offer alternative licensing programs to attract people into teaching, especially for hard-to-fill positions.
- Excellent job opportunities will stem from the large number of teachers expected to retire over the next 10 years, particularly at the secondary school level; job outlook will vary by geographic area and subject specialty.

Nature of the Work

Teachers act as facilitators or coaches, using interactive discussions and "hands-on" learning to help students learn and apply concepts in subjects such as science, mathematics, or English. As teachers move away from the traditional repetitive drill approaches and rote memorization, they are using more "props" or "manipulatives" to help children understand abstract concepts, solve problems, and develop critical thought processes. For example, they teach the concepts of numbers or adding and subtracting by playing board games. As children get older, they use more sophisticated materials such as science apparatus, cameras, or computers.

Many classes are becoming less structured, with students working in groups to discuss and solve problems together. Preparing students for the future workforce is the major stimulus generating the changes in education. To be prepared, students must be able to interact with others, adapt to new technology, and logically think through problems. Teachers provide the tools and environment for their students to develop these skills.

Preschool, kindergarten, and elementary school teachers play a vital role in the development of children. What children learn and experience during their early years can shape their views of themselves and the world, and affect later success or failure in school, work, and their personal lives. Preschool, kindergarten, and elementary school teachers introduce children to numbers, language, science, and social studies. They use games, music, artwork, films, books, computers, and other tools to teach basic skills.

Preschool children learn mainly through play. Recognizing the importance of play, preschool teachers build their program around it. They capitalize on children's play to further language development (storytelling and acting games), improve social skills (working together to build a neighborhood in a sandbox), and introduce scientific and mathematical concepts (balancing and counting blocks when building a bridge or mixing colors when painting). Thus, a less structured approach is used to teach preschool children, including small group lessons, one-on-one instruction, and learning through creative activities, such as art, dance, and music. Play and hands-on teaching also are used in kindergarten classrooms, but academics begins to take priority. Letter recognition, phonics, numbers, and awareness of nature and science are taught primarily by kindergarten teachers.

Most elementary school teachers instruct one class of children in several subjects. In some schools, two or more teachers work as a team and are jointly responsible for a group of students in at least one subject. In other schools, a teacher may teach one special subject—usually music, art, reading, science, arithmetic, or physical education—to a number of classes. A small but growing number of teachers instruct multilevel classrooms, with students at several different learning levels.

Middle and secondary school teachers help students delve more deeply into subjects introduced in elementary school and expose them to more information about the world. Middle and secondary school teachers specialize in a specific subject, such as English, Spanish, mathematics, history, or biology. They also can teach subjects that are career-oriented. Vocational education teachers instruct and train students to work in a wide variety of fields, such as health care, business, auto repair, communications, and, increasingly, technology. They often teach courses that are in high demand by area employers, who may provide input into the curriculum and offer internships to students. (Special education teachers—who instruct elementary and secondary school students who have a variety of disabilities—are discussed separately in this section of the *Handbook*.)

Teachers may use films, slides, overhead projectors, and the latest technology in teaching, including computers, telecommunication systems, and video discs. Use of computer resources, such as educational software and the Internet, exposes students to a vast range of experiences and promotes interactive learning. Through the Internet, American students can communicate with students in other countries. Students also use the Internet for individual research projects and information gathering. Computers are used in other classroom activities as well, from helping students solve math problems to learning English as a second language. Teachers also may use computers to record grades and perform other administrative and clerical duties. They must continually update their skills so that they can instruct and use the latest technology in the classroom.

Teachers often work with students from varied ethnic, racial, and religious backgrounds. With growing minority populations in many parts of the country, it is important for teachers to establish rapport with a diverse student population. Accordingly, some schools offer training to help teachers enhance their awareness and understanding of different cultures. Teachers may also include multicultural programming in their lesson plans to address the needs of all students, regardless of their cultural background.

Teachers design classroom presentations to meet student needs and abilities. They also work with students individually. Teachers plan, evaluate, and assign lessons; prepare, administer, and grade tests; listen to oral presentations; and maintain classroom discipline. They observe and evaluate a student's performance and potential, and increasingly are asked to use new assessment methods. For example, teachers may examine a portfolio of a student's artwork

Teachers must communicate well, inspire trust and confidence, and motivate students to learn.

or writing to judge the student's overall progress. They then can provide additional assistance in areas where a student needs help. Teachers also grade papers, prepare report cards, and meet with parents and school staff to discuss a student's academic progress or personal problems.

In addition to classroom activities, teachers oversee study halls and homerooms, supervise extracurricular activities, and accompany students on field trips. They identify physical or mental problems and refer students to the proper resource or agency for diagnosis and treatment. Secondary school teachers occasionally assist students in choosing courses, colleges, and careers. Teachers also participate in education conferences and workshops.

In recent years, site-based management, which allows teachers and parents to participate actively in management decisions, has gained popularity. In many schools, teachers are increasingly involved in making decisions regarding the budget, personnel, textbook choices, curriculum design, and teaching methods.

Working Conditions

Seeing students develop new skills and gain an appreciation of knowledge and learning can be very rewarding. However, teaching may be frustrating when one is dealing with unmotivated or disrespectful students. Occasionally, teachers must cope with unruly behavior and violence in the schools. Teachers may experience stress when dealing with large classes, students from disadvantaged or multicultural backgrounds, and heavy workloads. Schools, particularly in inner cities, may be run down and lack the amenities of schools in wealthier communities.

Teachers are sometimes isolated from their colleagues because they work alone in a classroom of students. However, some schools are allowing teachers to work in teams and with mentors to enhance their professional development.

Including school duties performed outside the classroom, many teachers work more than 40 hours a week. Part-time schedules are more common among preschool and kindergarten teachers. Although some school districts have gone to all-day kindergartens, most kindergarten teachers still teach two kindergarten classes a day. Most teachers work the traditional 10-month school year with a 2-month vacation during the summer. During the vacation break, those on the 10-month schedule may teach in summer sessions, take other jobs, travel, or pursue other personal interests. Many enroll in college courses or workshops to continue their education. Teachers in districts with a year-round schedule typically work 8 weeks, are on vacation for 1 week, and have a 5-week midwinter break. Preschool teachers working in day care settings often work year round.

Most States have tenure laws that prevent teachers from being fired without just cause and due process. Teachers may obtain tenure after they have satisfactorily completed a probationary period of teaching, normally 3 years. Tenure does not absolutely guarantee a job, but it does provide some security.

Employment

Teachers held about 3.8 million jobs in 2000. Of those, about 1.5 million were elementary school teachers, 1.1 million were secondary school, 590,000 were middle school, 423,000 were preschool, and 175,000 were kindergarten teachers. Approximately 15 percent of elementary, middle, and secondary school teachers work for private schools. Preschool facilities are often located in schools, religious institutions, and workplaces in which employers provide day care for their employees' children. Employment of teachers is distributed geographically, much the same as the population.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require public school teachers to be licensed. Licensure is not required for teachers in private schools. Usually licensure is granted by the State board of education or a licensure advisory committee. Teachers may be licensed to teach the early childhood grades (usually nursery school through grade 3); the elementary grades (grades 1 through 6 or 8); the middle grades (grades 5 through 8); a secondary education subject area (usually grades 7 through 12); or a special subject, such as reading or music (usually grades kindergarten through 12).

Requirements for regular licenses to teach kindergarten through grade 12 vary by State. However, all States require general education teachers to have a bachelor's degree and to have completed an approved teacher training program with a prescribed number of subject and education credits as well as supervised practice teaching. About one-third of the States also require technology training as part of the teacher certification process. A number of States require specific minimum grade point averages for teacher licensure. Other States require teachers to obtain a master's degree in education, which involves at least 1 year of additional coursework beyond the bachelor's degree, with a specialization in a particular subject.

Almost all States require applicants for teacher licensure to be tested for competency in basic skills such as reading, writing, teaching, and subject matter proficiency. Most States require continuing education for renewal of the teacher's license. Many States have reciprocity agreements that make it easier for teachers licensed in one State to become licensed in another.

Increasingly, States are moving towards implementing performance-based standards for licensure, which require passing a rigorous comprehensive teaching examination to obtain a provisional license. Teachers must then demonstrate satisfactory teaching performance over an extended period to obtain a full license.

Many States offer alternative teacher licensure programs for people who have bachelor's degrees in the subject they will teach, but lack the necessary education courses required for a regular license. Alternative licensure programs originally were designed to ease teacher shortages in certain subjects, such as mathematics and science. The programs have expanded to attract other people into teaching, including recent college graduates and mid-career changers. In some programs, individuals begin teaching quickly under provisional licensure. After working under the close supervision of experienced educators for 1 or 2 years while taking education courses outside school hours, they receive regular licensure if they have progressed satisfactorily. Under other programs, college graduates who do not meet licensure requirements take only those

courses that they lack, and then become licensed. This may take 1 or 2 semesters of full-time study. States may issue emergency licenses to individuals who do not meet requirements for a regular license when schools cannot attract enough qualified teachers to fill positions. Teachers who need licensure may enter programs that grant a master's degree in education, as well as a license.

In many States, vocational teachers have many of the same requirements for teaching as their academic counterparts. However, since knowledge and experience in a particular field are the most important criteria for the job, some States will license vocational education teachers without a bachelor's degree, provided they can demonstrate expertise in their field.

Licensing requirements for preschool teachers vary by State. Requirements for public school teachers are generally higher than those for private preschool teachers. Some States require a bachelor's degree in early childhood education and others require an associate degree, while others may require certification by a nationally recognized authority. The Child Development Associate (CDA) credential is the most common type of certification. It requires a mix of classroom training and experience working with children, along with an independent assessment of an individual's competence.

For several years, the National Board for Professional Teaching Standards has offered voluntary national certification for teachers in kindergarten through grade 12. To become nationally certified, teachers must prove their aptitude by compiling a portfolio showing their work in the classroom, and by passing a written assessment and evaluation of their teaching knowledge. Currently, teachers may become certified in 1 of 7 areas. These areas are based on the age of the students and, in some cases, subject area. For example, teachers may obtain a certificate for teaching English language arts to early adolescents (ages 11-15), or they may become certified as early childhood generalists. All States recognize national certification, and many States and school districts provide special benefits to teachers holding national certification. Benefits typically include higher salaries and reimbursement for continuing education and certification fees. Additionally, many States allow nationally certified teachers to carry a license from one State to another.

The National Council for Accreditation of Teacher Education currently accredits more than 500 teacher education programs across the United States. Generally, 4-year colleges require students to wait until their sophomore year before applying for admission to teacher education programs. Traditional education programs for kindergarten and elementary school teachers include courses—designed specifically for those preparing to teach—in mathematics, physical science, social science, music, art, and literature, as well as prescribed professional education courses such as philosophy of education, psychology of learning, and teaching methods. Aspiring secondary school teachers either major in the subject they plan to teach while also taking education courses, or major in education and take subject courses. Teacher education programs are now required to include classes in the use of computers and other technologies to maintain accreditation. Most programs require students to perform a student teaching internship.

Many States now offer professional development schools, which are partnerships between universities and elementary or secondary schools. Students enter these 1-year programs after completion of their bachelor's degree. Professional development schools merge theory with practice and allow the student to experience a year of teaching first-hand, with professional guidance.

In addition to being knowledgeable in their subject, teachers must have the ability to communicate, inspire trust and confidence, and motivate students, as well as understand their educational and emotional needs. Teachers must be able to recognize and respond to individual differences in students, and employ different teaching methods that will result in higher student achievement. They should be organized, dependable, patient, and creative. Teachers also must be able to work cooperatively and communicate effectively with other teaching staff, support staff, parents, and other members of the community.

With additional preparation, teachers may move into positions as school librarians, reading specialists, curriculum specialists, or guidance counselors. Teachers in kindergarten through grade 12 may become administrators or supervisors, although the number of these positions is limited and competition can be intense. In some systems, highly qualified, experienced teachers can become senior or mentor teachers, with higher pay and additional responsibilities. They guide and assist less experienced teachers while keeping most of their own teaching responsibilities. Preschool teachers usually work their way up from assistant teacher, to teacher, then to lead teacher—who may be responsible for instruction of several classes—and finally to director of the center. A master's degree is often required to become a director. Preschool teachers with a bachelor's degree often are also qualified to teach kindergarten through grade 3. Teaching at these higher grades often results in higher pay.

Job Outlook

Job opportunities for teachers over the next 10 years should be excellent, attributable mostly to the large number of teachers expected to retire. Although employment of preschool, kindergarten, elementary, middle, and secondary school teachers is expected to increase about as fast as the average for all occupations, a large proportion will be eligible to retire by 2010, creating many vacancies, particularly at the secondary school level. Intense competition for good teachers is already under way among employers in many locations, with schools luring teachers from other States and districts with bonuses and higher pay.

Overall enrollments through 2010, a key factor in the demand for teachers, are projected to rise slowly, resulting in average employment growth for all teachers from preschool to secondary grades. However, projected enrollments vary by region. States in the South and West—particularly California, Texas, Arizona, and Georgia—will experience large enrollment increases, while States in the Northeast and Midwest may experience declines. Projected enrollments also differ by grade, with enrollments rising moderately in grades 9 through 12, while remaining fairly steady for all other grades over the 2000-10 period.

The job market for teachers also continues to vary by school location and by subject specialty. Many inner cities—often characterized by overcrowded, ill-equipped schools and higher than average poverty rates—and rural areas—characterized by their remote location and relatively low salaries—have difficulty attracting enough teachers, so job prospects should be better in these areas than in suburban districts. Currently, many school districts have difficulty hiring qualified teachers in some subject areas—mathematics, science (especially chemistry and physics), bilingual education, foreign languages, and computer science. Specialties that currently have an adequate number of qualified teachers include general elementary education, physical education, and social studies. Teachers who are geographically mobile and who obtain licensure in more than one subject should have a distinct advantage in finding a job. Increasing enrollments of minorities, coupled with a shortage of minority teachers, should cause efforts to recruit minority teachers to intensify. Also, the number of non-English speaking students has grown dramatically, especially in California and Florida, which have large Spanish-speaking student populations, creating demand for bilingual teachers and those who teach English as a second language.

The number of teachers employed also is dependent on State and local expenditures for education and enactment of legislation to increase the quality of education. A number of initiatives, such as reduced class size (primarily in the early elementary grades), mandatory preschool for 4-year-olds, and all-day kindergarten have been implemented in a few States, but implementation nationwide has been limited. Additional teachers, particularly preschool and early elementary school teachers, will be needed if States or localities implement any of these measures. Because of a shortage of teachers in certain locations and in anticipation of the loss of a number of teachers to retirement, many States are implementing policies that will encourage more students to become teachers. Some are giving large signing bonuses that are distributed over the teacher's first few years of teaching. Some are expanding State scholarships; issuing loans for moving expenses; and implementing loan-forgiveness programs, allowing education majors with at least a B average to receive State-paid tuition so long as they agree to teach in the State for 4 years.

The supply of teachers also is expected to increase in response to reports of improved job prospects, more teacher involvement in school policy, and greater public interest in education. In recent years, the total number of bachelor's and master's degrees granted in education has steadily increased. In addition, more teachers will be drawn from a reserve pool of career changers, substitute teachers, and teachers completing alternative certification programs, relocating to different schools, and re-entering the workforce.

Earnings

Median annual earnings of kindergarten, elementary, middle, and secondary school teachers ranged from $37,610 to $42,080 in 2000; the lowest 10 percent earned $23,320 to $28,460; the top 10 percent earned $57,590 to $64,920. Median earnings for preschool teachers were $17,810.

According to the American Federation of Teachers, beginning teachers with a bachelor's degree earned an average of $27,989 in the 1999-2000 school year. The estimated average salary of all public elementary and secondary school teachers in the 1999-2000 school year was $41,820. Private school teachers generally earn less than public school teachers.

In 1999, more than half of all public school teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.

Teachers can boost their salary in a number of ways. In some schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Getting a master's degree or national certification often results in a raise in pay, as does acting as a mentor teacher. Some teachers earn extra income during the summer teaching summer school or performing other jobs in the school system.

Related Occupations

Preschool, kindergarten, elementary, middle, and secondary school teaching requires a variety of skills and aptitudes, including a talent for working with children; organizational, administrative, and recordkeeping abilities; research and communication skills; the power to influence, motivate, and train others; patience; and creativity. Workers in other occupations requiring some of these aptitudes include teachers—postsecondary; counselors; teacher assistants; education administrators; librarians; childcare workers; public relations specialists; social workers; and athletes, coaches, umpires, and related workers.

Sources of Additional Information

Information on licensure or certification requirements and approved teacher training institutions is available from local school systems and State departments of education.

Information on the teaching profession and on how to become a teacher can be obtained from:

➤ Recruiting New Teachers, Inc., 385 Concord Ave., Suite 103, Belmont, MA 02478. Internet: **http://www.rnt.org**

This organization also sponsors another Internet site that provides helpful information on becoming a teacher: **http://www.recruitingteachers.org**

Information on teachers' unions and education-related issues may be obtained from:

➤ American Federation of Teachers, 555 New Jersey Ave. NW., Washington, DC 20001. Internet: **http://www.aft.org**

➤ National Education Association, 1201 16th St. NW., Washington, DC 20036. Internet: **http://www.nea.org**

A list of institutions with accredited teacher education programs can be obtained from:

➤ National Council for Accreditation of Teacher Education, 2010 Massachusetts Ave. NW., Suite 500, Washington, DC 20036. Internet: **http://www.ncate.org**

For information on careers in educating children and issues affecting preschool teachers, contact:

➤ National Association for the Education of Young Children, 1509 16th St. NW., Washington, DC 20036. Internet: **http://www.naeyc.org**

➤ Association for Childhood Education International, 17904 Georgia Ave., Suite 215, Olney, MD 20832-2277. Internet: **http://www.acei.org**

For eligibility requirements and a description of the Child Development Associate credential, contact:

➤ Council for Early Childhood Professional Recognition, 2460 16th St. NW., Washington, DC 20009. Internet: **http://www.cdacouncil.org**

Teachers—Special Education

(O*NET 25-2041.00, 25-2042.00, 25-2043.00)

Significant Points

- A bachelor's degree, completion of an approved teacher preparation program, and a license are required to qualify; many States require a master's degree.
- Many States offer alternative licensure programs to attract people into these jobs.
- Excellent job prospects are expected due to rising enrollments of special education students and reported shortages of qualified teachers.

Nature of the Work

Special education teachers work with children and youths who have a variety of disabilities. A small number of special education teachers work with severely mentally retarded or autistic children, primarily teaching them life skills and basic literacy. However, the majority of special education teachers work with children with mild to moderate disabilities, using the general education curriculum, or modifying it, to meet the child's individual needs. Most special education teachers instruct students at the elementary, middle, and secondary school level, although some teachers work with infants and toddlers.

The various types of disabilities qualifying for special education programs include specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, autism, deaf-blindness, traumatic brain injury, and other health impairments. Students are classified under one of the categories, and special education teachers are prepared to work with specific groups. Early identification of a child with special needs is an important part of a special education teacher's job. Early intervention is essential in educating children with disabilities.

Special education teachers use various techniques to promote learning. Depending on the disability, teaching methods can include individualized instruction, problem-solving assignments, and small group work. When students need special accommodations for test-taking, special education teachers see that appropriate ones are provided, such as having the questions read orally or lengthening the time allowed to take the test.

Special education teachers help to develop an Individualized Education Program (IEP) for each special education student. The IEP sets personalized goals for each student and is tailored to a student's individual learning style and ability. This program includes a transition plan outlining specific steps to prepare special education students for middle school or high school, or in the case of older students, a job or postsecondary study. Teachers review the IEP with the student's parents, school administrators, and often the student's general education teacher. Teachers work closely with parents to inform them of their child's progress and suggest techniques to promote learning at home.

Special education teachers design and teach appropriate curricula, assign work geared toward each student's ability, and grade papers and homework assignments. They are involved in a student's behavioral as well as academic development. They help special education students develop emotionally, be comfortable in social situations, and be aware of socially acceptable behavior. Preparing special education students for daily life after graduation is an important aspect of the job. Teachers help students learn routine skills, such as balancing a checkbook, or provide them with career counseling.

As schools become more inclusive, special education teachers and general education teachers increasingly work together in general education classrooms. Special education teachers help general educators adapt curriculum materials and teaching techniques to meet the needs of students with disabilities. They coordinate the work of teachers, teacher assistants, and related personnel, such as therapists and social workers, to meet the requirements of inclusive special education programs, in addition to teaching special education students. A large part of a special education teacher's job involves interacting with others. They communicate frequently with parents, social workers, school psychologists, occupational and physical therapists, school administrators, and other teachers.

Special education teachers work in a variety of settings. Some have their own classrooms and teach only special education students; others work as special education resource teachers and offer individualized help to students in general education classrooms; and others teach with general education teachers in classes composed of both general and special education students. Some teachers work in a resource room, where special education students work several hours a day, separate from their general education classroom. A significantly smaller proportion of special education teachers works in residential facilities or tutor students in homebound or hospital environments.

The methods of teaching used by special education teachers include individualized instruction, problem-solving assignments, and group work.

Special education teachers who work with infants usually travel to the child's home to work with the child and his or her parents. Many of these infants have medical problems that slow or preclude normal development. Special education teachers show parents techniques and activities designed to stimulate the infant and encourage the growth of the child's skills. Toddlers usually receive their services at a preschool where special education teachers help them develop social, self-help, motor, language, and cognitive skills, often through the use of play.

Technology is playing an increasingly important role in special education. Special education teachers use specialized equipment such as computers with synthesized speech, interactive educational software programs, and audiotapes to assist children.

Working Conditions

Special education teachers enjoy the challenge of working with students with disabilities and the opportunity to establish meaningful relationships. Although helping these students can be highly rewarding, the work can also be emotionally and physically draining. Many special education teachers are under considerable stress due to heavy workloads and administrative tasks. They must produce a substantial amount of paperwork documenting each student's progress and work under the threat of litigation by students' parents if correct procedures are not followed, or if the parents feel their child is not receiving an adequate education. The physical and emotional demands of the job cause some special education teachers to leave the occupation.

Some schools offer year-round education for special education students, but most special education teachers only work the traditional 10-month school year.

Employment

Special education teachers held a total of about 453,000 jobs in 2000. The majority—234,000—taught preschool, kindergarten, and elementary school students. Another 96,000 taught middle school students, and 123,000 taught secondary school students. Most taught in public and private schools, but a few worked in specialized educational facilities, residential facilities, or in homebound or hospital environments.

Training, Other Qualifications, and Advancement

All 50 States and the District of Columbia require special education teachers to be licensed. State boards of education or a licensure advisory committee usually grant licenses, and licensure varies by State. In many States, special education teachers receive a general education credential to teach kindergarten through grade 12. These teachers train in a specialty, such as learning disabilities or behavioral disorders. Some States offer general special education licenses, others license several different specialties within special education, while others require teachers to first obtain a general education license and then an additional license in special education.

All States require a bachelor's degree and completion of an approved teacher preparation program with a prescribed number of subject and education credits and supervised practice teaching. Many States require special education teachers to obtain a master's degree in special education, involving at least 1 year of additional coursework, including a specialization, beyond the bachelor's degree.

Some States have reciprocity agreements allowing special education teachers to transfer their license from one State to another, but many still require special education teachers to pass licensing requirements for that State. In the future, employers may recognize certification or standards offered by a national organization.

Many colleges and universities across the United States offer programs in special education, including undergraduate, master's, and doctoral programs. Special education teachers usually undergo longer periods of training than general education teachers. Most bachelor's degree programs are 4-year programs including general and specialized courses in special education. However, an increasing number of institutions require a fifth year or other postbaccalaureate preparation. Courses include educational psychology, legal issues of special education, child growth and development, and knowledge and skills needed for teaching students with disabilities. Some programs require specialization. Others offer generalized special education degrees, or study in several specialized areas. The last year of the program usually is spent student teaching in a classroom supervised by a certified teacher.

Alternative and emergency licenses are available in many States, due to the need to fill special education teaching positions. Alternative licenses are designed to bring college graduates and those changing careers into teaching more quickly. Requirements for an alternative license may be less stringent than for a regular license and vary by State. In some programs, individuals begin teaching quickly under a provisional license. They can obtain a regular license by teaching under the supervision of licensed teachers for a period of 1 to 2 years while taking education courses. Emergency licenses are granted when States have difficulty finding licensed special education teachers to fill positions.

Special education teachers must be patient, able to motivate students, understanding of their students' special needs, and accepting of differences in others. Teachers must be creative and apply different types of teaching methods to reach students who are having difficulty. Communication and cooperation are essential traits because special education teachers spend a great deal of time interacting with others, including students, parents, and school faculty and administrators.

Special education teachers can advance to become supervisors or administrators. They may also earn advanced degrees and become instructors in colleges that prepare others for special education teaching. In some school systems, highly experienced teachers can become mentor teachers to less experienced ones; they provide guidance to these teachers while maintaining a light teaching load.

Job Outlook

Employment of special education teachers is expected to increase faster than the average for all occupations through 2010, spurred by continued growth in the number of special education students needing services, legislation emphasizing training and employment for individuals with disabilities, and educational reforms requiring higher standards for graduation. The need to replace special education teachers who switch to general education, change careers altogether, or retire will lead to additional job openings. At the same time, many school districts report shortages of qualified teachers. As a result, special education teachers should have excellent job prospects.

The job outlook varies by geographic area and specialty. Although all areas of the country report difficulty finding qualified applicants, positions in inner cities and rural areas usually are more plentiful than job openings in suburban or wealthy urban areas. Student populations, in general, also are expected to increase significantly in several States in the West and South, resulting in increased demand for special education teachers in these regions. In addition, job opportunities may be better in certain specialties—such as speech or language impairments, and learning disabilities—because of large enrollment increases of special education students classified under these disability categories. Legislation encouraging early intervention and special education for infants, toddlers, and preschoolers has created a need for early childhood special education teachers. Special education teachers who are bilingual or have multicultural experience also are needed to work with an increasingly diverse student population.

The number of students requiring special education services has grown steadily in recent years . This trend is expected to continue. Learning disabilities will continue to be identified and diagnosed at earlier ages. In addition, medical advances have resulted in more children surviving serious accidents or illnesses, but with impairments that require special accommodations. The percentage of foreign-born special education students also is expected to grow as teachers begin to recognize learning disabilities in this population. Finally, more parents are expected to seek special services for their children if they have difficulty meeting the new, higher standards required of students.

Earnings

Median annual earnings of preschool, kindergarten, and elementary school special education teachers in 2000 were $40,880. The middle 50 percent earned between $32,330 and $52,440. The lowest 10 percent earned less than $26,640, and the highest 10 percent earned more than $66,210.

Median annual earnings of middle school special education teachers in 2000 were $38,600. The middle 50 percent earned between $31,360 and $49,150. The lowest 10 percent earned less than $26,500, and the highest 10 percent earned more than $61,590.

Median annual earnings of secondary school special education teachers in 2000 were $41,290. The middle 50 percent earned between $32,840 and $52,860. The lowest 10 percent earned less than $27,180, and the highest 10 percent earned more than $67,030.

In 2000, about 57 percent of special education teachers belonged to unions—mainly the American Federation of Teachers and the National Education Association—that bargain with school systems over wages, hours, and the terms and conditions of employment.

In most schools, teachers receive extra pay for coaching sports and working with students in extracurricular activities. Some teachers earn extra income during the summer, working in the school system or in other jobs.

Related Occupations

Special education teachers work with students who have disabilities and special needs. Other occupations involved with the identification, evaluation, and development of students with disabilities include psychologists, social workers, speech-language pathologists and audiologists, counselors, teacher assistants, occupational therapists, recreational therapists, and teachers—preschool, kindergarten, elementary, middle, and secondary.

Sources of Additional Information

For information on professions related to early intervention and education for children with disabilities, a list of accredited schools, teacher certification, financial aid information, and general information on related personnel issues—including recruitment, retention, and supply of and demand for special education professionals—contact:

➤ National Clearinghouse for Professions in Special Education, Council for Exceptional Children, 1920 Association Dr., Reston, VA 20191-1589. Internet: **http://www.special-ed-careers.org**

To learn more about the special education teacher certification and licensing requirements in your State, contact your State's department of education.